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GenCore version 5.1.6
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7; Search time 361 Seconds (without alignments) 3098.044 Million cell updates/sec - nucleic search, using frame\_plus\_p2n model 3, 2004, 03:36:17 September OM protein Run on:

US-10-063-732-120 1172 1 MATHALEIAGLFLGGVGMVG......QKSYHTGKKSPSVYSRSQYV 225 Title: Perfect score: Sequence:

BLOSUM62 Scoring table:

0.5 7.0 7.0 10.0 , Xgapext ) 10.0 , Ygapext ) 6.0 , Fgapext 6.0 , Delext Xgapop Ygapop Fgapop Delop

seqs, 2485319735 residues 3267054 Searched:

6534108 Total number of hits satisfying chosen parameters:

000000000 Minimum DB seq length: Maximum DB seq length: Match 0% Match 100% first 45 summaries Post-processing: Minimum Maximum Listing

Command line parameters:
-MODEL=frame+ p2n.model -DEV=xlh
-Q=/cgn2 1/USPTO spool/US10063732/runat 01092004 155518 20479/app query.fasta\_1.391
-DB=Published Applications NA -QFMT=fastap -SUFFĪX=rnpb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR MX=100
-THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXIEN=2000000000 -USER=US10063732 @CGN 1 1354 @runat 01092004 155518 20479
-NCPU=6 -ICPU=3 -NO MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100
-NCPU=6 -ICPU=3 -NO MMAP -LARGEQUERY -NEG SCORES=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database :

Published Applications NA:\*

1: /cgn2\_6/ptodata/1/pubpna/US07\_PUBCOMB.seq:\*

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3: /cgn2\_6/ptodata/1/pubpna/US06\_PUBCOMB.seq:\*

4: /cgn2\_6/ptodata/1/pubpna/US07\_NEW\_PUB.seq:\*

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6: /cgn2\_6/ptodata/1/pubpna/US08\_NEW\_PUB.seq:\*

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112: /cgn2\_6/ptodata/1/pubpna/US09\_NEW\_PUB.seq:\*

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19: /cgn2\_6/ptodata/1/pubpna/US10B\_PUBCOMB.seq:\*

19: /cgn2\_6/ptodata/1/pubpna/US10B\_PUBCOMB.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Query Score Match Length DB Result No.

	42, A	App	App	App	, App	App	App	App	App	Ann	444	App	App	App	App	App	App	App	App	Ann	44.4	444	dd <del>u</del>	App	App	App	App	App	App	Ann	And	47.4	404	4 4	4 4	4 C	לי ני לי ני	ر رو د د د	A 1	App	App	App	App	App	App	Ann	Ann	12.6	447
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## ALIGNMENTS

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APPLICANT: Penn, Sharron G.
APPLICANT: Penn, David R.
APPLICANT: Penn, David R.
APPLICANT: Hanzel, David K.
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR TITLE OF INVENTION: EXPRESSION ANALYSIS TWO FILE REFERENCE: AEOMICA-X-2 CURRENT APPLICATION NUMBER: US/10/029,386 CURRENT FILING DATE: 2001-12-20 NUMBER OF SEQ ID NOS: 34288 SOFTWARE: Annomax Sequence Listing Engine vers. 1.1 SEQ ID NO 22722 LENGTH: 678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: MAP TO AP000884.1
OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 0.97
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 1.2
                                Sequence 22722, Application US/10029386
Publication No. US20030194704A1
GENERAL INFORMATION:
US-10-029-386-22722/c
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EXPRESSED IN FETAL LIVER, SIGNAL = 0.96
EXPRESSED IN LUNG, SIGNAL = 1.2
SWISSPROT HIT: P56748, EVALUE 1.00e-120
NT HIT: gil4780163, EVALUE 0.00e+00
EST_HUMAN HIT: AU121779.1, EVALUE 0.00e+00
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                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
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Patent No. US20020102604A1
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, Jean
APPLICANT: Bougueleret, Lydie
APPLICANT: Jobert, Severin
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                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
TITLE OF INVENTION: FULL-LENGTH HUMAN CDNAS; FILE REFERENCE: 78.US3.REG
CURRENT APPLICATION NUMBER: US/09/731,872
CURRENT FILING DATE: 2000-12-07
PRIOR APPLICATION NUMBER: US 60/169,629
PRIOR FILING DATE: 1999-12-08
PRIOR FILING DATE: 1999-12-08
PRIOR FILING DATE: 2000-03-06
NUMBER OF SEQ ID NOS: 482
SOFTWARE: Patent.pm
SEQ ID NO 164
LENGTH: 1793
   CDNAB
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1172.00
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CRGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: 173..847
US-09-731-872-164
                                                                                                                                                  Alignment Scores:
Pred. No.:
Score:
Percent Similarity:
Best Local Similarity:
Query Match:
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APPLICANT: Bestoy, Dan L.
APPLICANT: Beston, Dan L.
APPLICANT: Betan, Dan L.
APPLICANT: Betan, Dan L.
APPLICANT: Gao, Wei-Giang
APPLICANT: Gao, Wei-Giang
APPLICANT: Gao, Wei-Giang
APPLICANT: Gaodard, Audrey
APPLICANT: Gaodard, Audrey
APPLICANT: Garaldi, Christopher J.
APPLICANT: Garaldi, Christopher J.
APPLICANT: Gaurney, Austin L.
APPLICANT: Gaurney, Austin L.
APPLICANT: Bani, James
APPLICANT: Bani, James
APPLICANT: Remeth J.
APPLICANT: Smith, Victoria APPLICANT: William I.
APPLICANT: William I. Mickey
APPLICANT: William I. Mickey
APPLICANT: William I. Mickey
APPLICANT: William I. Mickey
APPLICANT: William I. Smith APPLICANTON WINBER: 60/09912
PRIOR APPLICATION WINBER: 60/09912
PRIOR APPLICATION WINBER: 60/09913
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION WUNBER: 60/09913
PRIOR APPLICATION WUNBER: 60/09913
PRIOR FILING DATE: 1998-09-01
PRIOR FILING DATE: 1998-09-09
PRIOR FILING DATE: 1998-09-09-09
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      593 GCCAATGCCATCATCAGAGATTTCTATAACTCAATAGTGAATGTTGCCCCAAAAACGTGAG
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; Sequence 327, Application US/09946374
; Publication No. US20030073129A1
; GENERAL INFORMATION:
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APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
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US-09-876-997-164

i Sequence 164, Application US/09876997

j Publication No. US20030152921A1

j GENERAL INFORMATION:
   APPLICANT: Dumas Milne Edwards, Jean Baptiste
   APPLICANT: Dobert, Severin
   ITILE OF INVENTION: FULL-LENGTH HUMAN CDNAS ENCODING POTENTIALLY SECRETED PROTEINS
   FILE REFERENCE: 78 US/09/876,997
   CURRENT PILING DATE: 2001-06-08
   PRIOR FILING DATE: 2000-12-07
   PRIOR FILING DATE: 2000-12-07
   PRIOR FILING DATE: 2000-12-07
   PRIOR FILING DATE: 2000-03-06
   PRIOR FILING DATE: 1999-12-08
   NUMBER OF SEQ ID NOS: 482
   SEPTIORE: PALENT. PALENT.
   SEPTIORE: PALENT. PALENT.
   FYEE: DATE: DAT
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NAME/KEY: CDS
LOCATION: 173.
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US-09-876-997-164
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N NUMBER: 60/100849

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N NUMBER: 60/100919

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N NUMBER: 60/101474

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N NUMBER: 60/101475 . 1998-09-23 NUMBER: 60/101479 : 1998-09-23 NUMBER: 60/101738 : 1998-09-24 1. 1998-09-15 1 NUMBER: 60/100388 2: 1998-09-15 1 NUMBER: 60/100390 3: 1998-09-15 NUMBER: 60/100584 : 1998-09-16 : NUMBER: 60/100627 : 1998-09-16 : NUMBER: 60/100661 NUMBER: 60/099763 3: 1998-09-10 N NUMBER: 60/099792 3: 1998-09-10 : 1998-09-10 I NUMBER: 60/099816 : 1998-09-10 I NUMBER: 60/100385 NUMBER: 60/101476 1998-09-23 NUMBER: 60/101477 /100662 NUMBER: 60/101741 NUMBER: 60/100664 : 1998-09-16 NUMBER: 60/100683 NUMBER: 60/099808 1998-09-10 /099812 /099815 60/099754 : 1998-09-16 NUMBER: 60/1 : 1998-09-16 NUMBER: 60/0 : 1998-09-10 NUMBER: 60/0 998-09-10 NUMBER: RELING DATE: 1
RELING FILING DATE:
APPLICATION N
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PRIOR APPLICATION NUMBER: 60/101915
PRIOR PELING DATE: 1998-09-24
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PRIOR PELING DATE: 1998-09-29
PRIOR PLING DATE: 1998-09-29
PRIOR PELING DATE: 1998-09-30
PRIOR PELING DATE: 1998-10-01
PRIOR PELING DATE: 1998-10-01
PRIOR PELING DATE: 1998-10-01
PRIOR PELING DATE: 1998-10-07
PRIOR PELING DATE: 1998-10-27
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US-10-015-395A-327

Sequence 327, Application US/10015395A
Publication No. US20040073015A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Beton, Dan 1.
APPLICANT: Faton, Dan 1.
APPLICANT: Forg, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, Audrey
PRIOR APPLICATION NUMBER: 60/105807
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                                                                                         Polypeptides and Nucleic
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APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Pan, James
APPLICANT: Pan, James
TITLE OF INVENTION: Secreted and Transmembrane Pol
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2830P1C57
CURRENT APPLICATION NUMBER: US/10/015,395A
CURRENT FILING DATE: 2001-12-12
Prior application removed - See file Wrapper or P6
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 327
LENGTH: 2010
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Matches:
Conservative:
Mismatches:
Indels:
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; ORGANISM: Homo sapiens
US-10-015-395A-327
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217 GIGGITITIGAAAACTICIGGGAAGGACIGIGGAIGAAIIGCGIGAGGCAGGCIAACAIC
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                                                                                                                                                                        397 GGCATGAAATGCACCAGGTGCACGGGGGACAATGAGAAAGGTGAAAGGCTCACATTCTGCTG
                              ArgMetGlnCysLysIleTyrAspSerLeuLeuAlaLeuSerProAspLeuGlnAlaAla
                                             277 AGGATGCAGTGCAAAATCTATGATTCCCTGCTGCTCTTTCTCCGGACCTACAGGCAGCC
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; Publication No. US20040033560A1
; GENERAL INFORMATION:
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APPLICANT: Chen, Jan.
APPLICANT: Chen, Jan.
APPLICANT: Chen, Jan.
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Paul J.
APPLICANT: Goddwish, Paul J.
APPLICANT: Smith, Victoria
APPLICANT: APPLICANT: ACIDS ENCODING THE SAME
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FRICK TRING DATE: 2002-01-26
PRIOR FILING DATE: 2002-01-26
PRIOR FILING DATE: 1997-01-18
PRIOR FILING DATE: 1997-01-18
PRIOR FILING DATE: 1997-10-24
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PRIOR FILING DATE: 1997-10-24
PRIOR FILING DATE: 1997-10-28
PRIOR PLING 
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; GENERAL INFORMATION:
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US-10-206-915-357
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997-10-28
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: 612
PRIOR APPLICATION NUMBER: 60/063540
PRIOR FILING DATE: 1997-10-28
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PRIOR APPLICATION NUMBER: 60/063544
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Sequence 357, Application US/10201858
Publication No. US20040038337A1
GENERAL INFORMATION:
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US-10-201-858-357
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Sequence 357, Application US/10205890

Publication No. US20040048334A1

GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Chen, Jian
APPLICANT: Godaria, Audrey
APPLICANT: Godaria, Audrey
APPLICANT: Godaria, Audrey
APPLICANT: Gurney, Austin L.
APPLICANT: Gurney, Austin L.
APPLICANT: Smith, Victoria
APPLICANTON NUMBER: 60/05266
APRIOR APPLICATION NUMBER: 60/05326
APRIOR APPLICATION NUMBER: 60/06326
APRIOR APPLICATION NUMBER: 60/06320
APRIOR APPLICATION NUMBER: 60/06312
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Publication No. US20040048335Al
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
; PRIOR FILING DATE: 1997-10-28
; Prior Application data removed -
; NUMBER OF SEQ ID NOS: 612
; SEQ ID NO 357
; LENGTH: 2010
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-205-890-357
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APPLICANT: Chen, Jian
APPLICANT: Desnoyers. Luc
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Paul J.
APPLICANT: Goddard, Paul J.
APPLICANT: Gonowski, Paul J.
APPLICANT: Pau, James
APPLICANT: Pau, James
APPLICANT: APPLICANT: Pau, James
APPLICANT: APPLICANT: ALSHI, Victoria
APPLICANT: APAGA Milliam I.
APPLICANT: Mod, William I.
APPLICANT: Mod, William I.
APPLICANT: Mod, William I.
APPLICANT: ALAIDE SENCODING THE SAME
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NOCLEIC
CURRENT FILING DATE: 2002-01-29
FRICK PELICATION NUMBER: 10/05286
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-00-18
PRIOR FILING DATE: 1997-00-17
PRIOR APPLICATION NUMBER: 60/06326
PRIOR FILING DATE: 1997-10-24
PRIOR FILING DATE: 1997-10-24
PRIOR PELICATION NUMBER: 60/06340
PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063541
PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063541
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LeuPheCysCysValPheCysCysAsnGluLysSerSerSerTyrArgTyrSerIlePro
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APPLICANT: Watanabe, Colin K.
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3230R1C1
CURRENT APPLICATION NUMBER: US/10/063,745
CURRENT FILING DATE: 2002-05-09
Prior Application removed - See Palm or File Wrapper NUMBER OF SEQ ID NOS: 170
SEQ ID NO 119
LENGTH: 2010
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Query Match:
DB:
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; ORGANISM: Homo
US-10-063-745-119
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US-10-063-745-119
; Sequence 119, Application US/10063745
; Publication No. US20040058411A1
; GENERAL INFORMATION:
; APPLICANT: Eaton, Dan L.
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
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    ; TYPE: DNA
; ORGANISM: HOMO
US-10-201-853-357
                                           Alignment Scores Pred. No.:
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                    Sequence 119, Application US/10063512;
Publication No. US20030018183A1;
GENERAL INFORMATION:
APPLICANT: Eaton, Dan L.
APPLICANT: Filvaroff, Ellen
APPLICANT: Gerritsen, Mary E.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Gurney, Austin L.
APPLICANT: Matanabe, Colin K.
APPLICANT: Wood, William I.
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3230R1C1
CURRENT APPLICATION NUMBER: US/10/063, 512
CURRENT FILING DATE: 2002-05-01
PRIOR APPLICATION REMOVED - See File Wrapper or
NUMBER OF SEQ ID NOS: 170
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; ORGANISM: Homo Sapien
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NUMBER OF SEQ ID NOS:
SEQ ID NO 119
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US-10-063-512-119
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                                                                                                 21 ThrValAlaValThrValMetProGlnTrpArgValSerAlaPhelleGluAsnAsnIle
 LeuPheCysCysValPheCysCysAsnGluLysSerSerSerTyrArgTyrSerIlePro
                       CTGTTCTGCTGCGTTTTTTTGTTGCAACGAAAAGAGCAGTAGCTACAGATACTCGATACCT
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                                                                                                                                                                                                                                       Sequence 119, Application US/10063513;
Publication No. US20030018172A1;
GENERAL INFORMATION:
APPLICANT: Eaton, Dan L.
APPLICANT: Filvaroff, Ellen
APPLICANT: Goddard, Audrey
APPLICANT: Goddwski, Paul J.
APPLICANT: Godowski, Paul J.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Granaldi, Christopher J.
APPLICANT: Granaldi, Christopher J.
APPLICANT: Watanabe, Colin K.
APPLICANT: Watanabe, Colin K.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POL.
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3230RIC1
CURRENT APPLICATION NUMBER: US/10/063,513
CURRENT FILING DATE: 2002-05-01
Prior Application removed - See File Wrapper or Pal
NUMBER OF SEQ ID NOS: 170
SEQ ID NO 119
LENGTH: 2010
TAPP: NAN
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US-10-063-549-119
; Sequence 119, Application US/10063549
; Publication No. US20030027986A1
; GENERAL INFORMATION:
; APPLICANT: Eaton, Dan L.
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Godard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; TITLE OF INVENTION THE SAME
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- protein search, using sw model OM protein

September 1, 2004, 16:52:13 Run on:

3 ; Search time 41 Seconds
(without alignments)
1731.502 Million cell updates/sec

US-10-063-732-120 1172 1 MATHALEIAGLFLGGVGMVG.....QKSYHTGKKSPSVYSRSQYV 225 Title: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

seqs, 315518202 residues 1017041 Searched:

1017041 of hits satisfying chosen parameters: Total number

000000000 Minimum DB seq length: 0 Maximum DB seq length: 2

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

SPTREMBL\_25:\*

1: SP\_archea:\*
2: Sp\_bacteria:\*
3: Sp\_fungi:\*
4: Sp\_human:\*
5: Sp\_invertebrate:\*
6: Sp\_mammal:\*
7: Sp\_mhc:\*
8: Sp\_phage:\*
10: Sp\_phage:\*
10: Sp\_phage:\*
11: Sp\_rodent:\*
12: Sp\_virus:\*
13: Sp\_unclassified:\*
14: Sp\_unclassified:\*
15: Sp\_rvirus:\*
16: Sp\_bacteriap:\*
17: Sp\_archeap:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARTES

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4 Q7Z4Y7 4 Q7Z4X9	13 Q90XR6 13 O8AVG4	13 Q7ZTS2	13 Q90XQ8	13 Q90XS0	13 Q7T2E7	9 Q7YS66	4 Q96N78	11 Q9D7U6	13 Q8QHA3	11 09CX57	11 08BZS5	13 090XR7	13 Q7T021	4 08N7P3	5 Q9N9W1	5 Q9N9W2	6 Q7YS67	11 Q8VC62	13 Q7T018	11 Q9D7D7	6 Q9TUF7	13 Q90XR5	O	13 090XR1	O	13 Q7T020
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## ALIGNMENTS

		DT 01-MAR-2003 (TrEMBLrel. 23, Created) DT 01-MAR-2003 (TrEMBLrel. 23, Last semience undate)	01-OCT-2003 (TrEMBLrel. 25, Last	Similar to claudin-17.							-		"Analysis of the mouse transcriptome based on functional	60,770 full-length cDNAs.";		EMBI	.; 8	GO; GO:0005923;	.; G	InterPro; IPR006187;	TILETELD IERVOIDS LIBRAIN IEG.	Pfam: PF00	PRINTS; PR01077; CLAUDIN.		2 SEQUENCE 224 AA; 24653 MW; 6E049CE63AB60A34 CRC64;	Query Match 56.7%; Score 664.5; DB 11; Length 224; Best Local Similarity 54.7%; bred No. 2.10-E0.	vative 39
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                                                                                                                      RMOCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL 120
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DSMLALSQDLQAARALTVICILVALLAMLIGVVGAKCTNCIED-KNAKAKVSM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Euteleostomi;
                                                                                                                                                                                                                                                                                                                                       D Q805G0 PRELIMINARY; PRT; 213 AA.

Q805G0;
T Q1-JUN-2003 (TrEMBLrel. 24, Created)
T O1-JUN-2003 (TrEMBLrel. 24, Last sequence update)
T O1-JUN-2003 (TrEMBLrel. 25, Last annotation update)
T O1-OCT-2003 (TrEMBLrel. 25, Last annotation update)
E Claudin4L2.
N CLDN4L2.
S Xenopus laevis (African clawed frog).
S Kenopus laevis (African clawed frog).
C Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomic
C Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
X NCBI TaxID=8355;
N NCBI TaxID=8355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                M., Shibata M., Taira S., Taira M.; pattern analysis of the tight junction protein, early morphogenesis of Xenopus embryos."; irns 2:23-26(2002).
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                                                                                                                                                                                                                               67; Indels
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C:tight junction; IEA.
F:structural molecule activity; IEA.
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22913 MW; ACFIOFC95F9C16A1
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45.8%; Pred. No. 1.3e-45;
iive 43; Mismatches 67.
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Fujita M., Itoh M., Shibata M., Taira "Gene expression pattern analysis of talaudin, in the early morphogenesis of Gene Expr. Patterns 2:23-26(2002).
EMBL; AB072909; BAC21014.1; -...
GO; GO:0016020; C:membrane; IEA.
GO; GO:0005923; C:tight junction; IEA.
GO; GO:0005198; F:structural molecule InterPro; IPR006187; Claudin.
InterPro; IPR004031; PMP22 Claudin.
Pfam; PF00822; PMP22 Claudin.
Pfam; PF00822; PMP22 Claudin.
Pfam; PR01077; CLAUDIN; 1.
PRINTS; PR01077; CLAUDIN; 1.
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Q98SR2
ID Q98SR2;
AC Q98SR2;
DT 01-JUN-2001 (TrEMBLrel. 17, Created)
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Best Local Similarity 45.8
Matches 103; Conservative
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          MAFYPLQI
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                                                                                                  Gallus gallus (Chicken).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
Xenopodinae; Xenopus.
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Best Local Similarity 48.6%; Pred. No. 1.3e-45;
Matches 107; Conservative 38; Mismatches 65; Indels 10
                                                                                                                                                                                                                                                                                             Reardon E., Kojima S., Rizzolo L.J.;

Reardon E., Kojima S., Rizzolo L.J.;

"Sequence of chick claudin-3 cDNA.";

Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.

BMBL; AF334677; AAK20876.1; -.

GO; GO:0016020; C:membrane; IEA.

GO; GO:0005923; C:tight junction; IEA.

GO; GO:0005198; F:structural molecule activity; IEA.

InterPro; IPR006187; Claudin.

InterPro; IPR006188; Claudin.

Pfam; PF00822; PMP22 Claudin.

Pfam; PF00822; PMP22 Claudin.

Pfam; PF00822; PMP22 Claudin.

PRINTS; PR01077; CLAUDIN.

PROSITE; PS01346; CLAUDIN; 1.
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01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Claudin A (Claudin4L1).
sequence update)
annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   186 FCCNEKSSSYRYSIPSHRITQKSYHTGKKSPSVYSRSQYV
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Last
Last
(TrEMBLrel. 17, (TrEMBLrel. 24,
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Xenopus laevis (African clawed frog).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
Xenopodinae; Xenopus.
NCBI_TaxID=8355;
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                                                                                                                                                                                                                                                      Length 214;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                45.5%; Score 533; DB 13; Length 214; 47.9%; Pred. No. 4e-45; tive 43; Mismatches 61; Indels
                                                                                                                                                                                                             8E86F0EB2B72357D CRC64;
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23151 MW; 3F0D65E3ADE311E6 CRC64;
                                                                                  activity; IEA
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SEQUENCE FROM N.A.

TISSUE=Dorsal lip;

MEDLINE=21098758; PubMed=11161574;

MEDLINE=21098758; PubMed=11161574;

MEDLINE=21098758; PubMed=11161574;

MEDLINE=21098758; PubMed=11161574;

MEDLINE=21098758; PROCEST Tipt-Junction Protest Teach Andrews Tight-Junction Protest Teach Andrews Tight-Junction Protest Teach Andrews Tight-Junction Protest Teach Tea
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09DE12;
01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Transmembrane tight junction protein claudin.
                                                                                                                                                                                                                                              45.9%; Score 538; DB 13;
48.5%; Pred. No. 1.3e-45;
vative 43; Mismatches .56;
EMBL; AF359435; AAL01842.1; -.
EMBL; AB072908; BAC21013.1; -.
GO; GO:0016020; C:membrane; IEA.
GO; GO:0005923; C:tight junction; IEA.
GO; GO:0005198; F:structural molecule ac InterPro; IPR006187; Claudin.
InterPro; IPR006189; Claudin.reg.
InterPro; IPR004031; PMP22 Claudin.
Pfam; PF00822; PMP22 Claudin.
PFam; PF00822; PMP22 Claudin.
PROSITE; PR01077; CLAUDIN.
PROSITE; PS01346; CLAUDIN; 1.
SEQUENCE 214 AA; 22952 MW; BE86F0EB2
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PRINTS; PR01077; CLAUD
PROSITE; PS01346; CLAU
SEQUENCE 214 AA; 23
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QMQCKVYDSM
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99; Conser
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Best Local Similarity
Matches 103; Conser
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Best Local S:
Matches 99,
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                                                                                             RMQCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL
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MEDLINE=21417738; PubMed=11517306;

MEDLINE=21417738; PALO1832.1;

MEDLINE=21417738; PALO1832.1;

MEDLINE AF359425; AALO1832.1;

MEDLINE AF359425; AALO1832.1;

MEDLINE AF359425; AALO1832.1;

MEDLINE AF359425; AALO184; Dinction; IEA.

MEDLINE AF359425; AALO184; Claudin.

MEDLINE AF359425; AALO197; CLAUDIN.

MEDLINE AF359425; AA, A86F48D852E16CB2 CRC64;

MEDLINE AF359425; AA, AB6F48D852E16CB2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Brachydanio rerio (Zebrafish) (Danio rerio).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TrEMBLrel. 19, Created)
(TrEMBLrel. 19, Last sequence update)
(TrEMBLrel. 24, Last annotation update)
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                                                                                                                                                                                                                                                          181 LFCCVFCCNEKSSSY--RYSIPS----HRTTQKSY
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Best Local Similarity 47.4%;
Matches 100; Conservative 3
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Ol-JUN-2001 (TrEMBLrel. 17, Created)

Ol-JUN-2003 (TrEMBLrel. 24, Last annotation update)

Of Claudin-5.

Shallus gallus (Chicken).

CLDN5.

Shariota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Christiania, Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;

Ogellus.

NCBI TaxID=9031;

NCBI TaxID=9031;

NCBI TaxID=9031;

NCBI TaxID=9031;

NCBI TaxID=9031;
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Q90XR8
ID Q90XR8
AC Q90XR8;
DT 01-DEC-2001 (TrEMBLrel. 19, Last seq.
DT 01-DEC-2003 (TrEMBLrel. 24, Last annotation...
DT 01-UW-2003 (TrEMBLrel. 24, Last annotation...
GN Clouds Cartinopterygii, Neopterygii, Teleostei, Vertebrata; Buteleostomi;
OC Actinopterygii, Teleostei, Ostariophysi; Cypriniformes;
OC Actinopterygii, Teleostei; Ostariophysi; Cypriniformes;
OC Cyprinidae; Danio.
OC Cyprinidae
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MEDLINE=21417738; PubMed=11517306;

MOLINE=21417738; PubMed=11517306;

MOLINE=21417738; PubMed=11517306;

MOLINE=21417738; PubMed=11517306;

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MOLINE=21417738; PubMed=11517306;

MOLINE 
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Reardon E., Kojima S., Rizzolo L.J.;
Reardon E., Kojima S., Rizzolo L.J.;
"Sequence of chick claudin-5 cDNA.";
Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AF334678; AAK20877.1; -.
GO, GO:0016020; C:membrane; IEA.
GO, GO:0005923; C:tight junction; IEA.
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46.5%; Pred. No. 4.6e-44;
tive 47; Mismatches 63
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Matches 100; Conserv
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
NCBI_TaxID=7955;
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MEDLINE=21417738; PubMed=11517306;

MEDLINE=21417738; PubMed=11517306;

MEDLINE=21417738; PubMed=11517306;

MEDLINE=21417738; PubMed=11517306;

MEDLINE=21417738; PubMed=11517306;

MEDLINE=21417738; PubMed=11517306;

MEDLINE R., Nakamura S.K., Kappler J.A., Hudspeth A.J.;

MEDLINE R., Nakamura S.K., Kappler J.A., Hudspeth A.J.;

MEDLINE Resolution of claudin.

MEDLINE; PRO10522; PMP22 Claudin.

METERPRO 1 PR006183; PMP22 Claudin.

METERPRO 1 PR006187; CLAUDIN.

METERPRO 1 PR006187; CLAUDIN.

METERPRO 1 PR006187; CLAUDIN.

METERPRO 1 PR006187; CLAUDIN.
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                                                                                                                                                                                                                               th 44.2%; Score 517.5; DB 13; Length Similarity 45.0%; Pred. No. 1.4e-43; 95; Conservative 43; Mismatches 70; Indels
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214 AA; 22788 MW; 38163AB7E50BF058 CRC64;
                                                                                                                                                                                   5037A882DFF5433A CRC64;
GO; GO:0005198; F:structural molecule activity; IEA. InterPro; IPR006187; Claudin. InterPro; IPR006188; Claudin. reg. InterPro; IPR004031; PMP22 Claudin. Pfam; PF00822; PMP22 Claudin; 1. PR10177; CLAUDIN. 1. PROSITE; PS01346; CLAUDIN. 1. SEQUENCE 216 AA; 23180 MW; 5037A882DFF5433A CRC6
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(TrEMBLrel. 19, Last sequence update)
(TrEMBLrel. 24, Last annotation update)
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Best Local Similarity 44.1%; Pred. No. 1.6e-43;
Matches 97; Conservative 45; Mismatches 68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    210
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Altschuler, Feingold E.A., Grouse L.H., Derge J.G.,

Rausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

Rlausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

Rlausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

Ralschenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Rapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Rapleton M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Raha S.S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.J.,

Rahes S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Rahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

Rahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

Rahey J., Helton E., Ketteman J.W., Green E.D., Dickson M.C.,

Rablakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

Rablakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

"Generation and initial analysis of more than 15,000 full-length human
65 VYDSMLALGQDLQASRAMTVIAIILAVLGVMISVMGAKCTNCIED-EGAKAKVMIVSGIM 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       66 IYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNFKVKAHILLTAGII 125
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                                   IPVSWVANAIIRDFYNSIVNVAQKRELGEALYLGWTTALVLIVGGALFCCV
                                                         6 LEIAGLFLGGVGMVGTVAVTVMPQWRVSAFIENNIVVFENFWEGLWMNCVRQANIRMQCK
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Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Strausberg (NN-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; BC053223; AAH53223.1; -.
SEQUENCE 214 AA; 22792 MW; D896FD3E50DEF518 CRC64;
                                                                                                      PCCNEKSSSYRYSIPSHRITQKSYHTGKKSPSVYSRSQYV 225
                                                                                                                               FCCNEKSSSYRYSIPSHRTTQKSYHTGKKSPSVYSRSQYV 225
                                                                                                                                                                                                                                                             (TrEMBLrel. 25, Created)
(TrEMBLrel. 25, Last sequence update)
(TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                                                                                                                                                                        (Zebrafish) (Danio rerio)
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NCBL TaxID=7955;
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FIIAGILDLI
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MEDLINE=22388257;
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                                                                                                                                                                                                                                                             01-OCT-2003
01-OCT-2003
01-OCT-2003
                                                                                                                                                                                                                                                                                                                    Claudin h.
                                   126
                                                                                                        186
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Best Local
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                                                                                                                                                                                         RESULT 10
Q7T2P4
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125 IFILTGMVVLIPVSWVANALIRDFYNSIVNVAQKRELGEALYLGWTTALVLIVGGALFCC
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                                                                                                                                                                                                                Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
                                                                                                                                                                                                                                                                                        P SEQUENCE FROM N.A.

MEDLINE=21417738; PubMed=11517306;
A Kollmar R., Nakamura S.K., Kappler J.A., Hudspeth A.J.;
T "Expression and phylogeny of claudins in vertebrate primordia.";
Proc. Natl. Acad. Sci. U.S.A. 98:10196-10201(2001).
R EMBL; AF359430; AAL01837.1; -.
R ZFIN; ZDB-GENE-010328-10; cldnj.
R GO; GO:0016020; C:membrane; IEA.
R GO; GO:0005923; C:tight junction; IEA.
R GO; GO:0005198; F:structural molecule activity; IEA.
R GO; GO:0005198; F:structural molecule activity; IEA.
R InterPro; IPR006188; Claudin.
R InterPro; IPR004031; PMP22 Claudin.
R InterPro; IPR004031; PMP22 Claudin.
R PRM: PF00822; PMP22 Claudin; 1.
Pfam; PF00822; PMP22 Claudin; 1.
RRINTS; PR01077; CLAUDIN; 1.
SQUENCE 210 AA; 22895 MW; F9A6964463E55775 CRC64;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
NCBI_TaxID=7955;
[1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42.9%; Score 503; DB 13; Length 210; 43.0%; Pred. No. 3.9e-42; ive 47; Mismatches 67; Indels 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     185 VFCCNEKSSSYRYSIPSHRTTQKSYHTGKKSPSVYSRSQYV 225
--KPARMGYSAPRSASAGYDKKDYV 214
                                                                                                                     01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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Last annotation update)
                                                                                                                                                                                                  rerio (Zebrafish) (Danio rerio).
Getazoa; Chordata; Craniata; Vert
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                                                                                         PRELIMINARY;
             184 -- CPPKEKKY-
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Best Local Similarity
Matches 95; Conserv
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                                                                                                                                                                                                 Brachydanio
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01-DEC-2001
01-DEC-2001
01-JUN-2003
Claudin c.
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Q90XR2
ID Q90XR
AC Q90XR
DT 01-DE
DT 01-JU
DE CLDNC
GN CLDNC
GN Brach
OC BURAT
OC CYPTI
OX NCBI
RN [1]
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01-MAR-2002
01-MAR-2002
01-JUN-2003
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01-DEC-2001
01-DEC-2001
01-JUN-2003
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                                                                                                                                                                                                                                                                                                                                       9
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      MEDLINE=21417738; PubMed=11517306;

A MEDLINE=21417738; PubMed=11517306;

A Kollmar R., Nakamura S.K., Kappler J.A., Hudspeth A.J.;

Rollmar R., Nakamura S.K., Kappler J.A., Hudspeth A.J.;

L Expression and phylogeny of claudins in vertebrate primordia.";

Proc. Natl. Acad. Sci. U.S.A. 98:10196-10201(2001).

B EMBL; AF359432; AAL01839-1; -.

R ZFIN; ZDB-GENE-010328-3; cldnc.

R GO; GO:0005923; C:membrane; IEA.

GO; GO:0005923; C:tight junction; IEA.

GO; GO:0005198; F:structural molecule activity; IEA.

InterPro; IPR004031; PMP22 Claudin.

R Ffam; PF00822; PMP22 Claudin.

PFam; PF00822; PMP22 Claudin; 1.

PRINTS; PR01077; CLAUDIN.

SEQUENCE 218 AA; 23425 MW; 82CA23D13306110F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            OB1019 PRELIMINARY; PRT; 219 AA.
OB1019;
O1-JUN-2003 (TrEMBLrel. 24, Created)
O1-JUN-2003 (TrEMBLrel. 24, Last sequence update)
O1-JUN-2003 (TrEMBLrel. 25, Last annotation update)
O1-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Claudin 6.
Mus musculus (Mouse).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Musinae; Musinae;
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Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.
Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; BC050138; AAH50138.1; -.
GO; GO:0005923; C:tight junction; IEA.
GO; GO:0005198; F:structural molecule activity; IEA.
InterPro; IPR006187; Claudin.
InterPro; IPR006188; Claudin.
R InterPro; IPR004031; PMP22 Claudin.
R Pfam; PF00822; PMP22 Claudin.
R PRINTS; PR01077; CLAUDIN.
R PROSITE; PS01346; CLAUDIN; 1.
                                                                                                                                                                                                                                                                                                                                                                         LPCCVFCCNEKSSSYRYSIPSHRTTQKSYHTGKKSPSVYSRSQYV 225
                                                                                                                                                                                                                                                                                                                                                                                      : | | | : | | | :: |: | | | | ILCC--SCPPKDET-RYP-PQSRIAYSAHHS--VAPSTYNKRDYV 218
                                                                                                                                                                                   DB 13; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41.9%; Score 491; DB 11; Length ilarity 43.6%; Pred. No. 6.5e-41; Conservative 43; Mismatches 78; Indels
                                                                                                                                                                                                           Indels
                                                                                                                                                                                   42.4%; Score 497.5; DB 13; 42.7%; Pred. No. 1.5e-41; tive 48; Mismatches 74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE=Blastocyst;
                                                                                                                                                                                                            Conservative
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Best Local Similarity
Matches 98; Conserv
                                                                                                                                                                                                 Similarity 96; Conserv
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SEQUENCE FROM N.?
STRAIN=C57BL/6J;
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Best Local S
Matches 96
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RMQCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMWAILGMKCTRCTGDNEKVKAHILL
                                                                           Claudin a.
CLDNA.
Brachydanio rerio (Zebrafish) (Danio rerio).
Brachydanio rerio (Zebrafish) (Caniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
NCBI_TaxID=7955;
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**REDLINE=21417738; PubMed=11517306;

**REDLINE=21417738; PubMed=11517306;

**REDLINE=21417738; PubMed=11517306;

**ROlmar R., Nakamura S.K., Kappler J.A., Hudspeth A.J.;

**ROLIMAT R., Nakamura S.K., Kappler J.A., Hudspeth A.J.;

**RIPLINE Sion and phylogeny of claudins in vertebrate primordia.";

**REDLINE Sion and phylogeny of claudin.**

**DR Proc. Natl. Acad. Sci. U.S.A. 98:10196-10201(2001).

**PROS Sci. U.S.A. 98:10196-10201(2001).

**PROS Sci. U.S.A. 98:10196-10201(2001).

**PROS Sci. U.S.A. 98:10196-10201(2001).

**GO; GO:0005923; C:tight junction; IEA.

**DR GO; GO:0005923; C:tight junction; IEA.

**DR GO; GO:0005923; C:tight junction; IEA.

**DR InterPro; IPRO04031; PMP22 Claudin.

**DR InterPro; IPRO04031; PMP22 Claudin.

**DR Pfam; PF00822; PMP22 Claudin.

**DR Pfam; PMP22 Claudin.

**DR Pfam; PMP
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Best Local Similarity 47.5%; Pred. No. 3.4e-40;
Matches 87; Conservative 40; Mismatches 55; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                  LFCCVFCCNEKSSSYRYSIPSHRTTQKSYHTGKKSPSVYSRSQYV
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Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (TrEMBLrel. 19, Created)
(TrEMBLrel. 19, Last sequence update)
(TrEMBLrel. 24, Last annotation update)
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61 RMOCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAGIIFIITGMVVLIPVSWVANAIIRDFYNSIVNVAQKRELGEALYLGWTTALVLIVGGA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
40.7%; Score 477.5; DB 4; Length 266;
Best Local Similarity 41.0%; Pred. No. 1.8e-39;
Matches 94; Conservative 45; Mismatches 75; Indels 15; Gaps
Hypothetical protein (Fragment).
Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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N ILL TIGATE TOWN.

N SEQUENCE FROM N.A.

C TISSUE-Lung;

A Strausberg R.;

Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.

EMBL; BC019290; AAH19290.1; -.

GO; GO:0005923; C:tight junction; IEA.

GO; GO:0005923; C:tight junction; IEA.

GO; GO:0005198; F:structural molecule activity; IEA.

R GO; GO:0005198; F:structural molecule activity; IEA.

R InterPro; IPR006188; Claudin.

R InterPro; IPR004031; PMP22 Claudin.

Pfam; PF00822; PMP22 Claudin.

R PRINTS; PR01077; CLAUDIN.

R PRINTS; PR01346; CLAUDIN.

W PYPOthetical protein.

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27660 MW; 24AF39AF33A06E45 CRC64;
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Job time : 42 secs
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                                                         NCBI_TaxID=9606;
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OM protein - protein search, using sw model

2004, 16:52:38 1, September Run on:

8 ; Search time 18 Seconds (without alignments) 645.325 Million cell updates/sec

Title: Perfect score:

US-10-063-732-120 1172 1 MATHALEIAGLFLGGVGMVG......QKSYHTGKKSPSVYSRSQYV 225 Sequence:

BLOSUM62 Gapop 10. Scoring table:

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Total number of hits satisfying chosen parameters:

389414 segs, 51625971

Searched:

residues

389414

000000000 Minimum DB seq length: 0 Maximum DB seq length: 2

Match 0% Match 100% first 45 summaries Listing Post-processing: Minimum Maximum

Database :

1: /cgn2\_6/ptodata/2/iaa/5A\_COMB.pep:\*
2: /cgn2\_6/ptodata/2/iaa/5B\_COMB.pep:\*
3: /cgn2\_6/ptodata/2/iaa/6A\_COMB.pep:\*
4: /cgn2\_6/ptodata/2/iaa/6B\_COMB.pep:\*
5: /cgn2\_6/ptodata/2/iaa/PCTUS\_COMB.pep:\*
6: /cgn2\_6/ptodata/2/iaa/PCTUS\_COMB.pep:\* Patents AA: Issued

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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Result No.	Score	Query Match	Length	DB	ID	Description	
1	534	45.6	: [ 	1 4	-603-552-	1	
7	530	45.2		4	-60-	, אל	
m	489	Ч		4	-09-130-491-15	equence 363	
4	479	40.9		4	-09-205-258-3	744	
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9	477.5	40.7	218	4	09-489-847		
7	470	40.1	225	4	-673-395A-3	۱ ر ۱ م	
89	439	7.	211	4	-130-491-4	4	
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	439	7	211	4	-09-886-683	4	
	372.5	Ξ.	230	4	-699-	ά,	
12	363.5	31.0	230	4	663-600A-92	1 0	
	310.5	ė.	264	4	9-724-864-64	4	
	296	5	228	4	9-603-552-1	,	
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	294	Ŋ.	137	4	-09 - 312 - 283	equence 17	
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	201		207	Н	-08-557-917A-2		
	201	17.2	207	ო	US-09-084-153-2	Segmence 2. Appli	
	201		207	m	-09-084-079-	equence 2.	
	190	•	218	ო	US-09-084-079-5	equence 5.	
	143	•	72	4	-489-84	equence 36/	
	143		73	4	-489-847-2	equence 24	
	115	•	323	4	-030-8	emience 8	
	108		32	4	-205-258-87	equence 873	
	92.5		831	7	-734A-	equence 11.	
	92.5		831	4	-097-053-11	Sequence 11, Appl	

RESULT 2
US-09-621-976-5695
; Sequence 5695, Application US/09621976
; Patent No. 6639063
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.

	Sequence 6669, Ap	Sequence 9. Appli	0			Sequence 12. Appl			ά	0	4067	, ,		, -	72.0			
	US-09-328-352-6669	US-08-677-734A-9	US-08-677-734A-10	US-09-097-053-9	US-09-097-053-10	US-08-677-734A-12	US-09-097-053-12	US-08-883-070-3	US-08-903-139B-28	US-09-123-030-10	US-09-134-001C-4062	US-09-392-014-2	US-09-266-764-2	US-09-123-030-12	US-09-489-039A-7295	US-09-934-899-10	US-09-205-258-869	US-09-134-000C-5703
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1	æ. '	7.5	7.5	7.5	7.5	7.3	7.3	7.3	7.1	7.0	6.9	6.9	6.8	6.8	6.8	6.8	6.7	6.7
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Ċ	27	59	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

## ALIGNMENTS

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APPLICANT: Tang, Y. Tom
APPLICANT: Tang, Y. Tom
APPLICANT: Patterson, Chandra
TITLE OF INVENTION: RVP-1 VARIANT DIFFERENTIALLY EXPRESSED IN CROHN'S DISEASE
FILE REFERENCE: PC-0016 US
CURRENT APPLICATION NUMBER: US/09/603,552
CURRENT FILING DATE: 2000-06-22
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PERL Program
SEQ ID NO 13
LENGTH: 220
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65 VYDS:LALPQDLQAARALIVVAILLAAFGLLVALVGAQCTNCVQD-DTAKAKITIVAGVL 123
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 45.6%; Score 534; DB 4; L Best Local Similarity 46.2%; Pred. No. 9.2e-52; Matches 104; Conservative 35; Mismatches 72;
                                                                                                                                                                                                                                                                                                                                                           ; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: GenBank No. 6590089 g2570129
US-09-603-552-13
                   Sequence 13, Application US/09603552
Patent No. 6590089
GENERAL INFORMATION:
APPLICANT: Hillman, Jennifer L.
                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
-09-603-552-13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENSET.054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 5695
LENGTH: 113
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                                                                                                                                                                                                                                                                                                                         DB 4;
                                                                                                                                                                                                                                                                                                                        45.2%; Score 530; DB 4;
100.0%; Pred. No. 1e-51;
iive 0; Mismatches
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; Sequence 15, Application US/09130491
; Patent No. 6416974
; GENERAL INFORMATION:
; APPLICANT: Holtzman, Douglas A.
; TITLE OF INVENTION: TANGO-71, TANGO-73, TANGO
; FILE REFERENCE: 09404/041001
; CURRENT APPLICATION NUMBER: US/09/130,491
; CURRENT FILING DATE: 1998-08-07
; EARLIER APPLICATION NUMBER: US 60/058,108
; EARLIER FILING DATE: 1997-09-05
; EARLIER FILING DATE: 1997-08-06
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 15
; HANDER OF SEG ID NOS: 16
; MUMBER OF SEG ID NOS: 16
; SEQ ID NO 15
; HANDER OF NO 15
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Best Local Similarity 100.
Matches 103; Conservative
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                                                                                                                                                          TYPE: PRT
ORGANISM: Homo sapiens
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NAME/KEY: SIGNAL
LOCATION: -79...1
NAME/KEY: UNSURE
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61 RMQCKIYD
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US-09-621-976-5695
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US-09-130-491-15
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Query Match
Best Local Similarity 41.05
Matches 94; Conservative
                             ; TYPE: PRT
; ORGANISM: Rattus rattus
US-09-130-491-14
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US-09-489-847-209
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Sequence 14, Application US/09130491

Sequence 14, Application US/09130491

Patent No. 6416974

GENERAL INFORMATION:

APPLICANT: Holtzman, Douglas A.

TITLE OF INVENTION: TANGO-71, TANGO-74, TANGO-76, AND TANGO-83

FILE REFERENCE: 09404/041001

CURRENT APPLICATION NUMBER: US/09/130,491

CURRENT FILING DATE: 1998-08-07

EARLIER APPLICATION NUMBER: US 60/058,108

EARLIER PILING DATE: 1997-09-05

EARLIER FILING DATE: 1997-09-05

EARLIER FILING DATE: 1997-08-06

SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 14

LENGTH: 218
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                                                                                                                                                                                  E: 1997-06-06

N NUMBER: 60/048,962

E: 1997-06-06

N NUMBER: 60/048,877

E: 1997-06-06

N NUMBER: 60/048,878

E: 1997-06-06

N NUMBER: 60/070,923

E: 1997-12-18

N NUMBER: 60/092,921

E: 1998-07-15

N NUMBER: 60/094,657

E: 1998-07-30
                                                                              NUMBER: 60/048,897
1997-06-06
                                           048,883
                                                                                                                                       60/048,898
                                                                                                                                     NUMBER: 60/0.: 1997-06-06
                                                                                    NUMBER:
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EARLIER FILING DATE: 19
EARLIER APPLICATION NUM
EARLIER APPLICATION NUM
EARLIER FILING DATE: 19
EARLIER FILING DATE: 15
EARLIER FILING DATE: 16
EARLIER FILING DATE: 16
EARLIER FILING DATE: 17
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; FEATURE:
; NAME/KEY: SITE
; LOCATION: (202)
; OTHER INFORMATION: X
US-09-205-258-344
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Matches 88
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                                                                                    1 MATHALEIAGLFLGGVGMVGTVAVTVMPQWRVSAFIENNIVVFENFWEGLWMNCVRQANI
                                                                                                                61 RMQCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL
                                                                                                                                                                                                      TAGIIFIITGMVVLIPVSWVANAIIRDFYNSIVNVAQKRELGEALYLGWTTALVLIVGGA
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                                                  15;
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40.7%; Score 477.5; DB 4; Length
41.0%; Pred. No. 1.9e-45;
tive 45; Mismatches 75; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ** APPLICANT: Rosen et al TILE OF INVENTION: 98 Human Secreted Proteins FILE REFERENCE: PZO31P1

** CURRENT APPLICATION NUMBER: US/09/489,847

** CURRENT FILING DATE: 2000-01-24

** EARLIER APPLICATION NUMBER: PCT/US99/17130

** EARLIER APPLICATION NUMBER: 60/094,657

** EARLIER FILING DATE: 1999-07-29

** EARLIER FILING DATE: 1998-07-30

** EARLIER FILING DATE: 1998-08-05

** EARLIER APPLICATION NUMBER: 60/096,319

** EARLIER FILING DATE: 1998-08-05

** EARLIER FILING DATE: 1998-08-05

** EARLIER FILING DATE: 1998-08-06

** NUMBER OF SEQ ID NOS: 376

** SOFTWARE: PatentIn Ver. 2.0
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US-09-489-847-209
; Sequence 209, Application US/09489847
; Patent No. 6476195
; GENERAL INFORMATION:
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RESULT 9
US-09-603-552-12
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                                                                  Sequence 354, Application US/09673395A
; Sequence 354, Application US/09673395A
; Patent No. 6620923
; GENERAL INFORMATION:
; APPLICANT: SPECHT, THOMAS
; APPLICANT: BILARSKY, CHRISTIAN
; APPLICANT: PILARSKY, CHRISTIAN
; APPLICANT: DAHL, EDGAR
; APPLICANT: DAHL, EDGAR
; APPLICANT: DAHL, EDGAR
; APPLICANT: DAHL, EDGAR
; APPLICANT: DAHL, SOSENTHAL, ANDRE
; TILE OF INVENTION: HUMAN NUCLEIC ACID SEQUENCES FROM UTERUS TUMOR TISS
; FILE REFERENCE: ALBRE-12
; CURRENT FILING DATE: 2000-10-17
; NUMBER OF SEQ ID NOS: 637
; SOFTWARE: PATENTIN VEY: 2.1
; SEQ ID NO 354
; LENGTH: 225
; WARENT: PATENTINE ALBRE-12
; WARENT: PATENTINE ALBRE-12
; SEQ ID NO 354
; LENGTH: 225
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218
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                                                                                                                                                                                                                                                                                                                                                                                                                              40.1%; Score 470; DB 4;
Ly 40.9%; Pred. No. 1.4e-44;
ervative 42; Mismatches 77
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US-09-130-491-4

; Sequence 4, Application US/09130491
; Patent No. 6416974
; GENERAL INFORMATION:
; APPLICANT: Goodearl, Andrew D.J.
; TITLE OF INVENTION: TANGO-71, TANGO-73, TANGO;
; FILE REFERENCE: 09404/041001
; CURRENT APPLICATION NUMBER: US/09/130,491
; CURRENT FILING DATE: 1998-08-07
; EARLIER APPLICATION NUMBER: US 60/058,108
; SARLIER FILING DATE: 1997-09-05
; EARLIER FILING DATE: 1997-09-05
; BARLIER FILING DATE: 1997-08-06
; NUMBER OF SEQ ID NOS: 16
; COOTWARE: FASTSEQ for Windows Version 3.0
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  180 LLCCGAWVCTGRPDLSFPVKYSAPRRPTA-
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Best Local Similarity
Matches 92; Conserv
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; TYPE: PRT
; ORGANISM: Homo sap.
US-09-130-491-4
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Best Local Similari
Matches 83; Cons
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US-09-673-395A-354
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Sequence 12, Application US/09603552

Patent No. 6590089

GENERAL INFORMATION:
APPLICANT: Hillman, Jennifer L.
APPLICANT: Tang, Y. Tom
APPLICANT: Patterson, Chandra
TITLE OF INVENTION: RVP-1 VARIANT DIFFERENTIALLY EXPRESSED IN CROHN'S DISEASE
FILE REFERENCE: PC-0016 US
CURRENT APPLICATION NUMBER: US/09/603,552
CURRENT FILING DATE: 2000-06-22
NUMBER OF SEQ ID NOS:
SOFTWARE: PERL Program
SEQ ID NO 12
LENGTH: 211
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                   RMOCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL
MATHALEIAGLFLGGVGMVGTVAVTVMPQWRVSAFIENNIVVFENFWEGLWMNCVRQANI
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CTHER INFORMATION: Incyte ID No. 6590089 2057608CD1
US-09-603-552-12
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Sequence 4, Application US/09886683A
Patent No. 6627430
GENERAL INFORMATION:
APPLICANT: Hoevel, Thorsten
APPLICANT: Koch, Stefan
APPLICANT: Kubbies, Manfred
APPLICANT: Mundigl, Olaf
APPLICANT: Rueger, Petra
TITLE OF INVENTION: Antibodies against SEMP1 (p23)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 37.5%; Score 439; DB 4; 36.9%; Pred. No. 3.8e-41; tive 48; Mismatches 86
                                                                                                                                                                                                                                                               LLCC--SCPRKTTSY----PTPRPYPK----
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Best Local Similarity 36.9
Matches 83; Conservative
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US-09-663-600A-92
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LENGTH: 230
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                                                                                                                                                                                                                                                                             14;
                                                                                                                                                                                                                                               Length 211;
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APPLICANT: Duclert, Aymeric
APPLICANT: Bouguelexet, Lydie
TITLE OF INVENTION: EXTENDED CDNAS FOR SECRETED PROTEINS
FILE REFERENCE: 31.053.CTP
CURRENT APPLICATION NUMBER: US/09/663,600A
CURRENT FILING DATE: 2000-09-15
PRIOR APPLICATION NUMBER: 09/191,997
PRIOR FILING DATE: 1998-11-13
PRIOR PRICATION NUMBER: 60/069,957
PRIOR FILING DATE: 1997-12-17
PRIOR PILING DATE: 1998-02-09
PRIOR FILING DATE: 1998-04-13
PRIOR FILING DATE: 1998-09-04
NUMBER OF SEQ ID NOS: 229
SOFTWARE: Patent.pm
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3.8e-41;
FILE REFERENCE: Case 20692
CURRENT APPLICATION NUMBER: US/09/886,683A
CURRENT FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: EP00113344.6
PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 2001-04-05
PRIOR FILING DATE: 2001-04-05
NUMBER OF SEQ ID NOS: 4
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 186, Application US/09663600A
Patent No. 6573068
GENBRAL INFORMATION:
APPLICANT: Dumas Milne Edwards, Jean-Baptiste
                                                                                                                                                                                                                                                                         48; Mismatches
                                                                                                                                                                                                                                           Score 439;
Pred. No. 3
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                                                                                                                                                                                                                                                                       83; Conservative
                                                                                                                                                            LENGTH: 211
TYPE: PRT
ORGANISM: Homo sapiens
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; LOCATION: -24..-1
US-09-663-600A-186
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US-09-663-600A-186
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ENGTH: 230
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Best Local
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                                                                                                              1 MATHALBIAGLFLGGVGMVGTVAVTVMPQWRVSAFIENNIVVFENFWEGLWMNCVRQANI
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         Length 230;
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APPLICANT: Dumas Milne Edwards, Jean-Baptiste
APPLICANT: Duclert, Aymeric
APPLICANT: Duclert, Lydie
TITLE OF INVENTION: EXTENDED CDNAS FOR SECRETED PROTEINS
FILE REFERENCE: 31.US3.CIP
CURRENT APPLICATION NUMBER: US/09/663,600A
CURRENT APPLICATION NUMBER: 09/191,997
FRIOR APPLICATION NUMBER: 60/066,677
PRIOR FILING DATE: 1998-11-13
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-12-17
PRIOR APPLICATION NUMBER: 60/069,957
PRIOR FILING DATE: 1998-02-09
PRIOR FILING DATE: 1998-04-13
PRIOR FILING DATE: 1998-04-13
PRIOR FILING DATE: 1998-04-13
PRIOR FILING DATE: 1998-09-04
NUMBER: OF SEQ ID NOS: 229
SOFTWARE: Patent.pm
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i NAME/KEY: UNSURE
i LOCATION: 54,79
i CTHER INFORMATION: Xaa = any one of the twenty amino acids
US-09-663-600A-92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                        180 ALFCCVFCCNEK--SSSYRYSIPSHRTTOKSYHTGKKSPSV-
         DB 4;
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      31.8%; Score 372.5; DB 433.8%; Pred. No. 1.2e-33
                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 92, Application US/09663600A Patent No. 6573068
GENERAL INFORMATION:
                                             55;
                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SIGNAL
Query Match
Best Local Similarity
Matches 79; Conserv
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Query Match
Best Local S
Matches 74
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Fatent No. 6590089

GENERAL INFORMATION:

APPLICANT:

APPLICANT:

APPLICANT:

APPLICANT:

APPLICANT:

FILE REFERENCE:

CURRENT APPLICATION NUMBER: US/09/603,552

CURRENT APPLICATION NUMBER: US/09/603,552

NUMBER OF SEQ ID NOS:

SOFTWARE:

PERL PROGRAM

SEQ ID NOS:

13
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ITGMVVLIPVSWVANAIIRDFYNSIVNVAQKRELGEALYLGWTTALVLIVGG 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MATHALEIAGLFLGGVGMVGTVAVTVMPQWRVSAFIENNI-VVFENFWEGLWMNCVRQAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60 IRMOCKLYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                     RESULT 13
US-09-724-864-64
; Sequence 64, Application US/09724864
; Patent No. 6380362
; GENERAL INFORMATION:
; APPLICANT: Watson, James D
; TITLE OF INVENTION: Polynucleotides, polypeptides expressed
; TITLE OF INVENTION: by the polynucleotides and methods for their use.
; TITLE OF INVENTION: by the polynucleotides and methods for their use.
; FILE REFERENCE: 11000.105001
; CURRENT FILING DATE: 2000-11-28
; PRIOR APPLICATION NUMBER: U.S. No. 6380362 60/171,678
; PRIOR FILING DATE: 1999-12-23
; NUMBER OF SEQ ID NOS: 72
; SOFTWARE: FRASESEQ for Windows Version 4.0
                                                            180 ALFCCVFCCNEK--SSSYRYSIPSHRTTQKSYHTGKKSPSV----YSRSQYV
                                                                              25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
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; Pred. No. 1.3e-26;
44; Mismatches 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120 LTAGIIFIITGMVVLIPVSWVANAIIRDFYNSIVN
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31.8%;
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ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Incyt
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Best Local Similarity
Matches 70; Conserv
   LTAGIIFI
                                                                                                                                                                                                                                                                                                                                                                                        ; SEQ ID NO 64
; LENGTH: 264
; TYPE: PRT
; ORGANISM: Mouse
US-09-724-864-64
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SEQ ID NO 1
LENGTH: 228
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US-09-603-552-1
  120
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                                                                                                                                                                                     125 IFIITGMVVLIPVSWVANAIIRDFYNSIVNVAQKRELGEALYLGWTTALVLIVGGALFCC
                                                                                                     5 ALEIAGLFLGGVGMVGTVAVTVMPQWRVSAFIENNIVVFENFWEGLWMNCVRQANIRMQC
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                                                                                                                                                                                                                                                                                                                                                 RESULT 15
US-09-188-930-174
; Sequence 174, Application US/09188930A
; Patent No. 6150502
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Steeman, Lorna
; APPLICANT: Onrust, Rene
; APPLICANT: Murison, James Greg
; TITLE OF INVENTION: Compositions Isolated From Skin Cells
; TITLE OF INVENTION: and Methods For Their Use
; FILE REFERENCE: 11000.1011c1
; CURRENT APPLICATION NUMBER: US/09/188,930A
; CURRENT FILING DATE: 1998-11-09
; NUMBER OF SEQ ID NOS: 348
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 137;
Length 228
Score 296; DB 4; L
Pred. No. 4.4e-25;
36; Mismatches 109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 25.1%; Score 294; DB 3; Best Local Similarity 47.8%; Pred. No. 3.6e-25; Matches 55; Conservative 22; Mismatches 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1, 2004, 16:56:02
    25.3%;
32.6%;
                       Similarity 32.6
74; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       completed: September
ne : 19 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ) ORGANISM: Human
US-09-188-930-174
```

5.1.6 Compugen Ltd GenCore version (c) 1993 - 2004 Copyri

sw model using - protein search, OM protein

2004, 16:53:38 й Septembe Run on:

8 ; Search time 16 Seconds (without alignments) 1352.693 Million cell updates/sec

US-10-063-732-120 1172 1 MATHALEIAGLFLGGY Title: Perfect score: Sequence:

EIAGLFLGGVGMVG.....QKSYHTGKKSPSVYSRSQYV 225 .0 , Gapext 0.5 BLOSUM62 Gapop 10. Scoring table:

283366 seqs, 96191526 residues Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Match 100% first 45 summaries Match 0% Post-processing: Minimum Maximum Listing

Database

PIR\_78:\*
1: pir1:\*
2: pir2:\*
3: pir3:\*
4: pir4:\*

chance to have a result being printed, Pred. No. is the number of results predicted by chance to he score greater than or equal to the score of the result being and is derived by analysis of the total score distribution.

# STIMMARIES

ES	Description	11111111111111111111111111111111111111	amido acid transpo	ַלָּבָּ	NADH2 debydrogenes	rane pro	dehydroc	hypothetical prote	amino acid ARC tra	hypothetical prote	Na+/H+-exchanging					hynothetical prote	1 to		NADHO debudrogense	hmothetical prote	nrotein Koara o Gi				oluciani escului	Thompson crampore	himothetial proto	١.	יייסטרייים במווטז - ממסרומים	CDP-diglyceride sy
SUMMARIES	ID	A39484	m	A49182		A48300	T11489	T33784	C75609	848921	B40204	837078	78	LO	0	T23909	S59638	859637	T11398	T19126	E89551	T37330	AC0365	A40205	(n	AB0807	6	23.5	6418	735
	DB	[ 2	N	(7	7	N	~	N	7	7	7	7	7	7	7	~	7	N	7	~	7	7	~	N	7	2	7	0	N	7
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ф	Query Match	41.7	•	8.5	•	•	•	•	•	7.9	•		•	7.6	•	•	7.4	7.4	•	7.3		•	7.3	•		•	7.1	•		
	Scor	ıοc	ö	99.5	7.	ď.	4.	94	σ	92.5	ď.	Η.	о О	89	88	87	87	87	86.5	86	86	98	85.5	ъ.	85	84	83.5		83	
	Result No.	[	71	m	4	S	9	7	ω	6	10	11		13		15		17	18	19	20	21	22	23	24	25	26	27	28	29

probable sulfate t	Na+/H+-exchanging	hypothetical profe	NADH2 dehydrogenas	NADH dehvdrogenase	hypothetical profe	NADH dehvdrogenase	cell fusion protei	hypothetical prote	Conserved hypothet	probable membrane	probable metabolit	Na+/011008P	chloride channel n	hypothetical prote	hypothetical prote
D83631	B40205	T29720	T11528	B99613	G86285	B90615	847034	T23116	AF2687	B97469	AC0567	A53582	S19595	B69072	147831
N	7	N	(1	~	N	7	7	7	7	N	7	~	7	7	7
523	375	479	458	458	480	458	552	341	386	391	415	665	994	300	437
7.1	7.0	7.0	7.0	7.0	7.0	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.8	6.8
83	82.5	82.5	82	82	82	81	81	80.5	80.5	80.5	80.5	80.5	80.5	80	80
30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

## ALIGNMENTS

androgen withdrawal androgen-withdrawal apoptosis protein RVP1, prostatic - rat
C;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 03-Aug-1992 #sequence\_revision 03-Aug-1992 #text\_change 04-Mar-2000
C;Accession: A39484
R;Briehl, M.M.; Miesfeld, R.L.
Mol. Endocrinol. 5, 1381-1388, 1991
A;Title: Isolation and characterization of transcripts induced by androgen withd
A;Reference number: A39484; MUID:92130987; PMID:1723140
A;Reference number: A39484
A;Molecule type: mRNA
A;Residues: 1-280 <BRI>A;Residues: 1-280 <BRI>A;Genetics:
A;Genetics:
C;Genetics:
A;Gene: RVP.1
C;Superfamily: rat androgen-withdrawal apoptosis protein RVP1 A39484

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22; Length 280; Indels Query Match
41.7%; Score 489; DB 2; Le
Best Local Similarity 42.6%; Pred. No. 2e-39;
Matches 100; Conservative 41; Mismatches 72;

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RESULT 2

Anticolar transport protein - pig

NyAlternate names: Na+/amino acid cotransporter, SAAT1

C;Species: Sus scrofa domestica (domestic pig)

C;Date: 31-Dec-1993 #sequence\_revision 31-Dec-1993 #text\_change 20-Aug-1999

C;Accession: A44432

R;Kong, C.T.; Yet, S.F.; Lever, J.E.
J. Biol. Chem. 268, 1509-1512, 1993

A;Title: Cloning and expression of a mammalian Na+/amino acid cotransporter with sequenc A;Reference number: A44432; MUID:93131881; PMID:8420925

A;Accession: A44432

A;Molecule type: nucleic acid

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integral membrane protein MP20 - rat
integral membrane protein MP20
C;Species: Rattus norregicus (Norway rat)
C;Species: Rattus norregicus (Norway rat)
C;Species: Rattus norregicus (Norway rat)
C;Accession: A49182; 227883
C;Accession: A49182; 2.0.; Tenbroek, E.; Louis, C.F.
Exp. Eye Res. 56, 35-43, 1993
A;Title: Cloning and expression of a major rat lens membrane protein, MP20.
A;Reference number: A49182; MUID:93162128; PMID:7679355
A;Accession: A49182
A;Status: preliminary
A;Molecule type: nucleic acid
A;Residues: 1173 <KUM>
A;Cross-references: GB:55524; NID:g265405; PIDN:AAB25334.1; PID:g265406
A;Experimental source: lens
A;Note: sequence extracted from NCBI backbone (NCBIN:124760, NCBIP:124761)
R;Kumar, N.M.; Jarvis, L.J.; Tenbrock, E.; Louis, C.F.
Submitted to the EMBL Data Library, Pebruary 1992
A;Description: Cloning and expression of a major lens membrane protein, MP20.
A;Reference number: S27883
A;Molecule type: mRNA
A;Residues: 1-173 <KUMA>
A;Cross-references: EMBL:MB7053; NID:g205514; PIDN:AAA41631.1; PID:g205515
C;Superfamily: growth arrest-specific protein
C;Keywords: membrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
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                                                                                                                                                                                                                                                                                         ---NEKVKAHILLTAGIIFIITGMVVLIPVSWVANAIIRDFYNSIVNVAQKRELGEAL--
                                                                                                                                                                                                                                 CVRQANIRMQCKIYD-SLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGD--
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                                                                                                                                                                    Gaps
    PID:g164667
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kidney epithelial cell line LLC-PK1
sted from NCBI backbone (NCBIP:122778)
carrier protein
transport; membrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IITGMVVLIPVSWVANAIIRDFYNSIVNVAQKRELGE--
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ty 21.9%; Pred. No. 0.035;
ervative 25; Mismatches 75;
                                                                                                                       Query Match 8.6%; Score 100.5; DB 2; Best Local Similarity 27.0%; Pred. No. 0.11; Matches 38; Conservative 23; Mismatches 55;
                                                                                                                                                                                                                                                                                                                    ---YLGWTTALVLIVGGALFC 183
                                                                                                                                                                                                                                                                                                                                                                                                   LIVGGALFCCVFCCNE 190
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FASTLFVLLALA
    A; Cross-references: GB:I
A; Experimental source: k
A; Note: sequence extract
C; Superfamily: proline c
C; Keywords: amino acid t
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Best Local S
Matches 43
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gen
                                                                                                                                                                                                                                                                                                                                     A;Genome: mitochondrion
A;Genetic code: SGC1
C;Superfamily: NADH dehydrogenase (ubiquinone) chain 4
C;Keywords: membrane-associated complex; mitochondrion; NAD; oxidative phosphorylation;
                                                                                                                                                            novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   89
                            - chicken mitochondrion
NADH2 dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 4 - chicken mitochondrio (; Species: mitochondrion Gallus gallus (chicken)
C; Species: mitochondrion Gallus gallus (chicken)
C; Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 03-Jun-2002
C; Accession: S10196
R; Desjardins, P.; Morais, R.
J. Mol. Biol. 212, 599-634, 1990
A; Title: Sequence and gene organization of the chicken mitochondrial genome. A; Reference number: S10187; MUID: 90230301; PMID: 2329578
A; Accession: S10196
A; Molecule type: DNA
A; Residues: 1-459 < DES>
A; Cross-references: EMBL: X52392; NID: g12960; PIDN: CAA36634.1; PID: g12970
C; Genetics:
A; Genetics:
A; Genetics:
                                                                                                                                                                 genome.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          118 ILLTAGIIFIITGMVVLIPVSWVANAIIRDFYNSIVNVAQKRELGEALYLGWTTALVLIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LFLGGVGMVGTVAVTVMPQWRVSAFIENNIVVFENFWEGLWMN--CVRQANIRMQCKIYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SILALSPDLQAARGLMCAASVM----SFLAFMMAILGMKCTR----CTGDNEKVKAH---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 459;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         86;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 97.5; DB Pred. No. 0.15;
                                                                                                                                                                                                                                                                                                                                                                                                                                      8.3%; Scor.
23.7%; Pred. No. v...
.... 45; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 23.7
Matches 51; Conservative
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NiAlternate names: lens fiber cell membrane protein MP18; lens fiber membrane intrinsic C; Species: Bos primigenius taurus (cattle)
C; Species: Bos primigenius taurus (cattle)
C; Species: Bos primigenius taurus (cattle)
C; Date: 31-Dec-1993 #sequence revision 31-Dec-1993 #text_change 11-Jan-2000
C; Date: 31-Dec-1993 #sequence revision Protein in mammalian lens fiber cell membran A; Date references: By 955-961, 1990
C; Date: 31-Dec-1997 # Date revision of an 18,000-Daten protein in mammalian lens fiber cell membran A; Reference number: A34490; MUID: 90062105; PMID: 2584203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Molecule type: protein
A;Residues: 1-23 <LOU>
A;Experimental source: lens
B;Rao, G.N.; Gutekunst, K.A.; Church, R.L.
FEBS Lett. 250, 483-486, 1989
A;Title: Bovine lens 23, 21 and 19 kDa intrinsic membrane proteins have an identical am A;Reference number: $05010; MUID: 89325619; PMID: 2473922
A;Accession: $05010
A;Molecule type: protein
A;Residues: 1-20 <RAO>
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RESULT 8

C75609
anino acid ABC transporter, permease protein - Deinococcus radiodurans (strain R1)
C,5pecies: Deinococcus radiodurans
C,5pecies: Deinococcus radiodurans
C,5pecies: Deinococcus radiodurans
C,5pecies: Deinococcus radiodurans
C,5pecies: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 17-Mar-2000
C,Accession: C75609
R,Milte, O.; Eisen, J.A.; Heidelberg, J.F.; Hickey, E.K.; Peterson, J.D.; Dodson, R.J.;
M.; Shen, M.; Vamathevan, J.G.; Fraser, C.M.
S, Smith, H.O.; Venter, J.C.; Fraser, C.M.
Science 286, 1571-1577, 1999
A,Title: Genome sequence of the radioresistant bacterium Deinococcus radiodurans R1.
A,Reference number: A75250; MUD:20036896; PMID:10567266
A,Accession: C75609
A,Residues: Dreliminary
A,Molecule type: DNA
A,Residues: 1-484 < WHI>
A,Cross-references: GB:AE001862; GB:AE001825; NID:g6460468; PIDN:AAF12224.1; PID:g646051
A,Gene: DRA0136
A,Gene: DRA0136
A,Map position: 2
 C;Accession: T33784
R;Becker, M.; Graves, T.; Yoakum, M.
submitted to the EMBL Data Library, October 1998
A;Description: The sequence of C. elegans cosmid Y39D8A.
A;Reference number: Z21409
A;Reference number: Z21409
A;Reference T33784
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Residues: 1-468 <BEC>
A;Residues: 1-468 <BEC>
A;Cross-references: EMBL:AF101314; PIDN:AAC69224.1; GSPDB:GN00023; CESP:Y39D8A.1
A;Experimental source: strain Bristol N2; clone Y39D8A
C;Genetics:
A;Gene: CESP:Y39D8A.1
A;Map position: 5
A;Introns: 55/2; 118/1; 150/2; 194/2; 239/1; 302/1; 359/2; 404/3
C;Superfamily: Caenorhabditis elegans hypothetical protein Y39D8A.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                          11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----BPLFFGHSYLLALIIG--LFCGIGDCCVNSVRSVICALLMPKRRPQAFSVS 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94 AFMMAILGMKCTRCTGDNEKVKAHILLTAGIIFIITGMVVLIPVSWVANAIIRDFYNSIV 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SKRIKDFGQKPT--------MTIGAIF-ITMYCAMIHMSTPYDAPIRPTSK---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NVAQKRELGEALYLGWTTALVLIVGGALFCCV-FCC--NEKSSSYRYSIPSHR----TTQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---VGMVGTVAVTVMP---QWRVSAFIENNIVVFENFWEGLWMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6 LEIAGLF--LGGVGMVGTVAVTVMPQWRVSAFIENNIVVFENFWEGLWMNC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7.9%; Score 93; DB 2; Length 484; ilarity 26.4%; Pred. No. 0.42; Conservative 17; Mismatches 45; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             54 CVRQANIRMQCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAI 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----VRQANIRMQCKIYDSLLALSPDLQAARGLMCAA----
                                                                                                                                                                                                                                                                                                                                                                                                                                   .33;
                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 8.0%; Score 94; DB Best Local Similarity 24.2%; Pred. No. 0.33 Matches 59; Conservative 31; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 LEIAGLFLGG-----
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Matches 28; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         404
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Gene: NADH4
A;Genome: mitochondrion
A;Genetic code: SGC1
C;Superfamily: NADH dehydrogenase (ubiquinone) chain 4
C;Superfamily: NADH dehydrogenase (ubiquinone) chain 4
C;Keywords: membrane-associated complex; mitochondrion; NAD; oxidative phosphorylation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mitochondrion (fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Species: mitochondrion Oryctolagus cuniculus (domestic rabbit)
C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 03-Jun-2002
C;Accession: T11489
R;Gissi, C.; Gullberg, A.; Arnason, U.
Genomics 50, 161-169, 1998
A;Title: The complete mitochondrial DNA sequence of the rabbit, Oryctolagus cuniculus. A;Reference number: Z17275; MUID:98317530; PMID:9653643
A;Reference number: Z17275; MUID:98317530; PMID:9653643
A;Resion: T11489
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Residues: 1-459 <GIS>
A;Residues: 1-459 <GIS>
A;Cross-references: EMBL:AJ001588; NID:g3293006; PIDN:CAA04856.1; PID:g3293016
                                                                                                                                                9
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                                                                                                                                                                                                                                                                               67 YDSLLALSPDLQAARGLM----CAAS--VMSFLAFMMAILGMKCTRCTGDNEKVKAHIL 119
                                                                                                                                                                                                                                                                                                                                                                           120 LTAGIIFIITGMVVLIPVSWVANAIIRDFYNSIVNVAQKRELGE-----ALYLGWTTALV 174
                                                                                                                                                                                                                                                                                                                                                                                                                          --IYTGVTVSFLGRRFGDWRFSWSYILGWVALLM 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99
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T33784
hypothetical protein Y39D8A.1 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 09-Jun-2000
                                                                                                                                                                                     10 GLFLGGVGMVGTVAVTVMPQW---RVSAFIENNIVVFENFWEGLWMNCVRQANIRMQCKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 GLFCAWVGTILLVVATATDHWMQYRLSGAFAH------QGLWRYC-----LGTKCYL
                                                                                                                                                                                                                                                                                                                                     d-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LFLGGVGMVG-TVAVTVMPQWRVSAFIENNIVVFENFWEGLWMN----CVRQANIR----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       170 TTALVLIVGGALFCCVFCCNEKSSSYRYSIPSHRITQK---SYHTGKKSPS 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ---YSLYMLSTTQRGKFTYHTNNISPT 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61;
C;Superfamily: growth arrest-specific protein
C;Keywords: membrane protein
F;1-173/Product: lens membrane protein MP19 #status predicted <MAT>
                                                                                                   Length 173;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 459;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    - rabbit
                                                                                                                                            Indels
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                                                                                          Query Match 8.1%; Score 95.5; DB 2; Best Local Similarity 21.4%; Pred. No. 0.084; Matches 42; Conservative 25; Mismatches 76;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ubiquinone) (EC 1.6.5.3) chain 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   175 LIVGGALFCCVFCCNE 190
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TFFAGIFYMCAYRMHE 165
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FSAGIMFFASTFFVLLALA-
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SNLTIILMGTNVLITAL-
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Best Local
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Glorde channel protein CLC-1 - human
Cippeties: Homos applemes (man)
Cippeties: Sa7078; S55062; T38014; S3734
Risterimen-with Data Library, September 1993
A)ADecember: S37078; S5602; T38014; S7804
A)ADecember: Milimeric atructure of CLC-1 chloride channel revealed by mutations in d
A)ADecember: S37078
A)ADecember: S37078
A)ADecember: S37078
A)ADecember: Milimeric atructure of CLC-1 chloride channel revealed by mutations in c
A)AEFerence number: S37078
A)ADecember: Data Library, August 1993
A)ADecember: L-988 GSTEL-
A)ACCOSS-reference: REMBL: Z5584; NID: G397142; PID: Grannel revealed by mutations in c
A)AEFerence number: S3602
A)ADecember: Data Library, August 1993
A)ADecember: Data Library, August 1993
A)ADecember: Data Library, August 1993
A)ADecember: S3602
A)ADECEMBER: 
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340 ASGAET 345
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848921

hypothetical protein YHL047c - yeast (Saccharomyces cerevisiae)
C,Species: Saccharomyces cerevisiae
C,Species: Saccharomyces cerevisiae
C;Accession: S48921

R;Favello, T.

Submitted to the EMBL Data Library, June 1994
A;Beference number: 846794
A;Accession: S48921
A;Accession: S48921
A;Accession: B48921
A;Accession: B48921
A;Accession: B48921
A;Accession: S48921
A;Accession: S48021
A;Accession: S48021
A;Accession: S48021
A;Accession: S48021
A;Cross-references: EMBL:U11583; NID:g2289854; PIDN:AAB65059.1; PID:g2289876; GSPDB:GNOGC:Genetics:
A;Gene: SGD:TAFL; MIPS:YHL047C
A;Cross-references: SGD:S0001039
A;Map position: 8L
C;Superfamily: conserved probable membrane protein YCL073c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        oning of putative members of the Na/H exchanger gene family, cDNA
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NyAlternate names: Na+/H+ antiporter
C; Species: Rattus norvegicus (Norway rat)
C; Date: 28-Aug-1992 #sequence_revision 28-Aug-1992 #text_change 05-Nov-1999
C; Accession: B40204
R; Orlowski, J.; Kandasamy, R.A.; Shull, G.E.
J. Biol. Chem. 267, 9331-9339, 1992
A; Title: Molecular cloning of putative members of the Na/H exchanger gene family rally related proteins.
A; Reference number: A40204; MUID:92250539; PMID:1577762
A; Accession: B40204
A; Status: preliminary
A; Molecule type: mRNA
A; Kesidues: 1-831 < ORL)
A; Cross-references: GB: M85300; NID:g205706; PIDN: AAA41702.1; PID:g205707
C; Keywords: transmembrane protein
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                VMSFLAFMMAI ----LGMKCTRCTGDNEKVKAHIL-----LTAGIIF
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19.9%; Pred. No. 0.82;
tive 43; Mismatches
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N;Alternate names: Na+/H+ antiporter
C;Species: Rattus norvegicus (Norway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 7.9%;
Best Local Similarity 21.6%;
Matches 52; Conservative 4
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Best Local Similarity 19.9%
Thes 49; Conservative
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---VGMV-----GTVAVTVMPQWRVSAFIE---NNIVVFENFW

2 ATHALEIAGLFLGG-

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	A;Reference number: Z17264; MUID:99307147; PMID:10375625 A;Accession: T11358 A;Status: preliminary; translated from GB/EMBL/DDBJ A;Batus: preliminary; translated from GB/EMBL/DDBJ A;Gross-references: DNA A;Residues: 1-440 <cre> A;Cross-references: EMBL:AF117817; NID:g4927669; PID:g4927678; PIDN:AAD33238.1 C;Genetics: A;Gene: ND4 A;Gene: ND4 A;Gene: ND4 A;Genetic code: SGC4 C;Superfamily: NADH dehydrogenase (ubiquinone) chain 4 C;Superfamily: NADH dehydrogenase (ubiquinone) chain 4 C;Keywords: membrane-associated complex; mitochondrion; NAD; oxidative phosphorylation; Query Match C;Keywords: membrane-associated complex; mitochondrion; NAD; oxidative phosphorylation; Best Local Similarity 23.7%; Pred. No. 0.93; Matches 51; Conservative 29; Mismatches 51; Indels 84; Gaps 13;</cre>
RESULT 12 AH0781 probable membrane protein STY2426 [imported] - Salmonella enterica subsp. enterica serovar Typhi C;Species: Salmonella enterica subsp. enterica serovar Typhi A;Note: this species has also been called Salmonella typhi C;Accession: AH0781 R;Parter _ Chongan, G.; James, K.D.; Thomson, N.R.; Pickard, D.; Wain, J.; Churcher, th, T.; Connerton, P.; Cronin, A.; Davis, P.; Davies, R.M.; Dowd, L.; White, N.; Farrar, Nature 413, 848-852, 2001 A;Authors: Parry, C.; Quail, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; A;Title: Complete genome sequence of a multiple drug resistant Salmonella enterica serov A;Rcession: AH0781 A;Accession: AH0781 A;Status: preliminary A;Molecule type: DNA	OY   8 IAGLFLGGVGMVGTVAVTVMPQWRVSAFIENNIV
13382; PIDN:CAD02574.1; PID:g16503432; GSPD 7.6%; Score 89.5; DB 2; Length 380; 20.3%; Pred. No. 0.71; ive 41; Mismatches 82; Indels 73; VIVMPQWRVSAFIENNIVVFENFWEGLWMNCV:: INISAFGLPKAAYLNPAWYGAIVPEDAWSWAILDIV LSPDLQAARGLMCAASVMSFLAFMMAI	RESULT 14 S33044 hypothetical protein - human herpesvirus 4 C;Species: human herpesvirus 4, Epstein-Barr virus C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 13-Jan-1995 C;Accession: S33044 R;Farrell, P.J. submitted to the EMBL Data Library, March 1988 A;Reference number: S32973 A;Accession: S33044 A;Status: preliminary A;Molecule type: DNA A;Residues: 1-618 <far> A;Cross-references: EMBL:V01555</far>
Db 62LTLFALLFGAGLQMLLPRGKQWIQSRLTLIVLLGFIHALFFWDGDILLAYGLYGLIC 118  QY 105 TRCTGDNEKVKAHILLTAGIIFIITGMVVLIPVSWVANAIIRDFY 149	Query Match  Query Match  Best Local Similarity 26.1%; Pred. No. 1.6;  Matches 37; Conservative 15; Mismatches 66; Indels 24; Gaps 4;  Qy 61 RMQCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCT 108
RESULT 13 T11358 NADH2 dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 4 - Daphnia pulex mitochondrion C; Species: mitochondrion Daphnia pulex C; Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 03-Jun-2002 C; Accession: T11358 R; Crease, T.J. Gene 233, 89-99, 1999 A; Title: The complete sequence of the mitochondrial genome of Daphnia pulex (Cladocera:	Db 111 ASPQTPFLTRSGALYRFVTCCN 132  RESULT 15 T23909 hypothetical protein R04F11.1 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 12-Jun-2003 C;Harris, B.

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13;
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A;Reference number: Z19816
A;Accession: T23909
A;Status: preliminary: translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Rosidues: 1-297 <WIL>
A;Cross-references: EMBL:Z74475; PIDN:CAA98959.1; GSPDB:GN00023; CESP:R04F11.1
C;Genetics:
A;Gene: CESP:R04F11.1
C;Genetics:
A;Gene: CESP:R04F11.1
A;Map position: 5
A;Introns: 44/3; 82/3; 120/1; 156/1; 244/3
C;Superfamily: uncharacterized conserved protein K10D6.2b
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Compugen Ltd
 version 5
- 2004 (
GenCore Copyright (c) 1993
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sw model protein search, using 1 OM protein

1, 2004, 16:54:39 September Run on:

9; Search time 49 Seconds (without alignments) 1444.651 Million cell updates/sec

Title: Perfect score: Sequence:

US-10-063-732-120 1172 1 MATHALEIAGLFLGGVGMVG.....QKSYHTGKKSPSVYSRSQYV 225

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

seqs, 314612898 residues 1297172 Searched:

1297172 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Match 0% Match 100% first 45 summaries

Post-processing: Minimum Maximum Listing

Database

Published Applications AA:\*

1: \cgn2\_6/ptodata/1/pubpaa/US07\_PUBCOMB.pep:\*
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			Description	Sequence 405, App	•	Sequence 405, App		358,	358,	358,	358,	358	120,	120,	120,	120,	120	• •
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16 17 8	110	21	22	23	4, n	2 2	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

## ALIGNMENTS

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Sequence 405, Application US/09731872;
Patent No. US20020102604A1
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, Jean Baptiste
APPLICANT: Dumas Milne Edwards, Jean Baptiste
APPLICANT: Dugueleret, Lydie
APPLICANT: Bougueleret, Lydie
APPLICANT: Bougueleret, Lydie
APPLICANT: BOUGUELERGTH HUMAN CDNAS ENCODING POTENTIALLY SECRETED PROTEINS
FILE REFERENCE: 78.US3.REG
CURRENT APPLICATION NUMBER: US 60/169,629
FRIOR FILING DATE: 1999-12-08
PRIOR FILING DATE: 1999-12-08
PRIOR FILING DATE: 2000-03-06
NUMBER OF SEQ ID NOS: 482
SOFTWARE: Patent.pm
SEQ ID NO 405
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Best Local Similarity 100.
Matches 225; Conservative
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DR APPLICATION NUMBER: 60/100661

DR APPLICATION NUMBER: 60/100662

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DR APPLICATION NUMBER: 60/100664

DR FILING DATE: 1998-09-16

DR APPLICATION NUMBER: 60/100684

DR FILING DATE: 1998-09-16

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N NUMBER: US/09/946,374
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US-09-946-374-328
US-09-946-374-328
US-09-946-374-328
PUBLICANT: BAKET, Kevin P.
APPLICANT: BALSEE, Kevin P.
APPLICANT: BALSEE, Napoleone
APPLICANT: Betsein, David
APPLICANT: Betsein, David
APPLICANT: Betsein, David
APPLICANT: Gao, Wei-Oisung
APPLICANT: Gao, Wei-Oisung
APPLICANT: Galwei, Paul J.
APPLICANT: Gao, Wei-Oisung
APPLICANT: Galwei, Paul J.
APPLICANT: Galwei, Paul J.
APPLICANT: Galwei, Paul J.
APPLICANT: Galwei, Paul J.
APPLICANT: Galwei, Nicholas F.
APPLICANT: Ban, James
APPLICANT: Ban, James
APPLICANT: Sewart, Timothy A.
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Baniel
APPLICANT: Stewart, 1996-09-01
FRICK PREMENCE: P2830PLCI
CURRENT APPLICATION NUMBER: 60/09872
FRICK PLING DATE: 1996-09-01
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FRICK PLING DATE: 1996-09-01
FRICK PELING DATE: 1996-09-09-09-09-09-09-09-09-09
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RESULT 3
US-09-876-997-405

US-09-876-997-405

Sequence 405, Application US/09876997

Publication No. US20030152921A1

GENERAL INFORMATION:

APPLICANT: Dumas Milne Edwards, Jean Baptiste
APPLICANT: Jobert, Severin

TITLE OF INVENTION: FULL-LENGTH HUMAN CDNAS ENCODING POTENTIALLY SECRETED PROTEINS

FILE REFERENCE: 78.US4.CIP

CURRENT APPLICATION NUMBER: US 60/187,470

PRIOR FILING DATE: 2000-12-07

PRIOR APPLICATION NUMBER: US 60/169,629

PRIOR FILING DATE: 1999-12-08

NUMBER: OF SEQ ID NOS: 482

SEQ ID NO 405

LENGTH: 225

LENGTH: 225

LENGTH: 225

LENGTH: 225
         121 TAGIIFIITGMVVLIPVSWVANAIIRDFYNSIVNVAQKRELGEALYLGWTTALVLIVGGA 180
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Goddard, Audrey
Godowski, Paul J.
Gurney, Austin L.
Pan, James
Smith, Victoria
Watanabe, Colin K.
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APPLICANT: Chen, Jian
APPLICANT: Desnoyers, Luc
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul
APPLICANT: Gurney, Austin
APPLICANT: Fan, James
APPLICANT: Watanabe, Colin
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OR FILING DATE: 1998-10-07

OR APPLICATION NUMBER: 60/103395

OR APPLICATION NUMBER: 60/103396

OR FILING DATE: 1998-10-07

OR APPLICATION NUMBER: 60/103401

OR FILING DATE: 1998-10-07

OR APPLICATION NUMBER: 60/103638

OR FILING DATE: 1998-10-08

OR FILING DATE: 1998-10-08
   R APPLICATION NUMBER: 60/102307
R FILING DATE: 1998-09-29
R APPLICATION NUMBER: 60/102330
R FILING DATE: 1998-09-29
R APPLICATION NUMBER: 60/102331
R FILING DATE: 1998-09-29
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R FILING DATE: 1998-09-29
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R FILING DATE: 1998-09-30

R APPLICATION NUMBER: 60/102570

R FILING DATE: 1998-09-30

R APPLICATION NUMBER: 60/102571

R FILING DATE: 1998-09-30
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MBER: 60/102684

MBER: 60/102687

998-10-01

MBER: 60/102965

998-10-02

MBER: 60/10328

998-10-06

MBER: 60/103314
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MBER: 60/104987

998-10-20

MBER: 60/105000

998-10-20

MBER: 60/105104

998-10-21

MBER: 60/105169

998-10-22

MBER: 60/105694

MBER: 60/105693

998-10-22

MBER: 60/105693
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998-10-07
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IBER: 60/105807
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PRIOR APPLICATION NUMBERIOR FILING DATE: 1996
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4.9e-119;
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APPLICANT: Mood, William I.
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE ITILE OF INVENTION: ACIDS ENCODING THE SAME
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3430R1C513
CURRENT FILING DATE: 100052586
PRIOR APPLICATION NUMBER: 10/052586
PRIOR FILING DATE: 2002-01-15
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-10-24
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PRIOR FILING DATE: 1997-10-28
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US-10-199-670-358
Sequence 358, Application US/10199670
Publication No. US20040033560A1
GENERAL INFORMATION:
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Gurney, Austin L.
Pan, James
Smith, Victoria
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Watanabe, Colin K.
Wood, William I.
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APPLICANT: Chen, Jian
APPLICANT: Chen, Jian
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Pan, James
APPLICANT: Smith, Victoria
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William I.
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APPLICANT: Baker, Kevin P.
APPLICANT: Chen, Jian
APPLICANT: Chen, Jian
APPLICANT: Chen, Jian
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Godowski, Paul J.
APPLICANT: Godowski, Paul J.
APPLICANT: Smith, Victoria
APPLICANT: Smith, Victoria
APPLICANT: Watanabe, Colin K.
APPLICANT: Watanabe, Colin K.
APPLICANT: APPLICANT: ALIDIAM I.
APPLICANT: APPLICANT: ALIDIAM I.
APPLICANT: APPLICANT: ALIDA SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3430R1C464
CURRENT APPLICATION NUMBER: US/10/201,858
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TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3430R1C401
CURRENT APPLICATION NUMBER: US/10/199,670
CURRENT FILING DATE: 2002-07-19
PRIOR APPLICATION NUMBER: 60/059263
PRIOR APPLICATION NUMBER: 60/059266
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-10-18
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-10-24
PRIOR FILING DATE: 1997-10-28
PRIOR PRIOR PRIOR DATE: 1997-10-28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-199-670-358
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Sequence 358, Application US/10205890

Publication No. US20040048334A1

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.

APPLICANT: Chen, Jian

APPLICANT: Goddwack, Paul J.

APPLICANT: Goddwack, Paul J.

APPLICANT: Goddwack, Paul J.

APPLICANT: Godwski, Paul J.

APPLICANT: Godwski, Paul J.

APPLICANT: Smith, Victoria

APPLICANT: Smith, Victoria

APPLICANT: Smith, Victoria

APPLICANT: Wood, William I.

APPLICANT: Wood, William I.

APPLICANT: APPLICATION: ACIDS ENCODING THE SAME

FILE OF INVENTION: ACIDS ENCODING THE SAME

FILE APPLICATION NUMBER: US/10/205,890

CURRENT FILING DATE: 2002-07-26

PRIOR FILING DATE: 2002-01-15

PRIOR FILING DATE: 2002-01-15
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Best Local Similarity 100.0%; Pred. No. 4.5
Matches 225; Conservative 0; Mismatches
CURRENT FILING DATE: 2002-07-23
PRIOR APPLICATION NUMBER: 10/052586
PRIOR PILING DATE: 2002-01-15
PRIOR PILING DATE: 1997-09-18
PRIOR PILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059266
PRIOR FILING DATE: 1997-09-18
PRIOR PELING DATE: 1997-10-17
PRIOR PILING DATE: 1997-10-17
PRIOR PILING DATE: 1997-10-24
PRIOR APPLICATION NUMBER: 60/063121
PRIOR PILING DATE: 1997-10-24
PRIOR PILING DATE: 1997-10-24
PRIOR PILING DATE: 1997-10-24
PRIOR PILING DATE: 1997-10-21
PRIOR PILING DATE: 1997-10-21
PRIOR PILING DATE: 1997-10-28
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US-10-201-858-358
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US-10-205-890-358
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UKS-10-208-024-358

Fequence 358, Application US/10208024

Fublication No. US20040048335A1

GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Chen, Jian
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Mod. William I.
APPLICANT: Watanabe, Colin K.
APPLICANT: Alang, Zemin I.
APPLICANT: ALANGENICANION: ACIDS ENCODING THE SAME
FILE REFERENCE: PA130R1C538
FILE REFERENCE: PA130R1C538
CURRENT FILING DATE: 2002-07-29
PRIOR APPLICATION NUMBER: 10/052586
PRIOR APPLICATION NUMBER: 60/059263
PRIOR PILING DATE: 1997-09-18
PRIOR PILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059263
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PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-09-18
PRIOR PPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-09-18
PRIOR PLING DATE: 1997-10-17
PRIOR PILING DATE: 1997-10-24
PRIOR FILING DATE: 1997-10-24
PRIOR PILING DATE: 1997-10-24
PRIOR PILING DATE: 1997-10-24
PRIOR PILING DATE: 1997-10-24
PRIOR PILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063544
PRIOR PILING DATE: 1997-10-28
PRIOR PILING DATE: 1997-10-28
PRIOR PILING DATE: 1997-10-28
PRIOR PILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063544
PRIOR PILING DATE: 1997-10-28
PRIOR PILING DATE: 1
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US-10-205-890-358
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1 MATHALEIAGLFLGGVGMVGTVAVTVMPQWRVSAFIENNIVVFENFWEGLWMNCVRQANI
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PRIOR FILING DATE: 1997-09-18

PRIOR APPLICATION NUMBER: 60/062250

PRIOR FILING DATE: 1997-10-17

PRIOR FILING DATE: 1997-10-17

PRIOR PELING DATE: 1997-10-24

PRIOR PELING DATE: 1997-10-24

PRIOR PELING DATE: 1997-10-24

PRIOR PILING DATE: 1997-10-24

PRIOR PILING DATE: 1997-10-24

PRIOR PILING DATE: 1997-10-24

PRIOR PILING DATE: 1997-10-28

PRIOR FILING DATE: 297-10-28

PRIOR FILING DATE: 297-10-28

PRIOR FILING DATE: 297-10-28

PRIOR PILING DATE: 2007-10-28

PRIOR PILING DATE: 2007-10-28

PRIOR PILING DATE: 2007-10-28

PRIOR PILING DATE: 2007-10-28

PRIOR PILING DATE: 1997-10-28

PRIOR PILING DATE: 1997-10-2
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V NUMBER: 10/052586

3: 2002-01-15

N NUMBER: 60/059263

E: 1997-09-18

N NUMBER: 60/059266

E: 1997-09-18
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US-10-201-853-358
Sequence 358, Application US/10201853
Publication No. US20040053358A1
GENERAL INFORMATION:
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1997-10-17
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APPLICANT: Baker, Kevin P.
APPLICANT: Chen, Jian
APPLICANT: Coddard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Godowski, Paul J.
APPLICANT: Fan, James
APPLICANT: Smith, Victoria
APPLICANT: Smith, Victoria
APPLICANT: Matanabe, Colin K.
APPLICANT: Abang, Zemin
TITLE OF INVENTION: SECRETED AN
TITLE OF INVENTION: SECRETED AN
TITLE OF INVENTION: ACIDS ENCO
FILE REFERENCE: P3430R1C465
CURRENT APPLICATION NUMBER: 10/05
PRIOR FILING DATE: 2002-01-15
PRIOR APPLICATION NUMBER: 60/05
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-09-18
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Best Local Similarit
Matches 225; Conse
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US-10-208-024-358
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APPLICANT: Eaton, Dan L.

APPLICANT: Eaton, Dan L.

APPLICANT: Eaton, Dan L.

APPLICANT: Gerritsen, Mary B.

APPLICANT: Godwski, Paul J.

APPLICANT: Watanabe, Colin K.

APPLICANT: Wood, William I.

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

TITLE OF INVENTION: ACIDS ENCODING THE SAME

FILE REFERENCE: P3230R1C1

CURRENT FILING DATE: 2002-05-09

CURRENT FILING DATE: 2002-05-09

MUMBER OF SEQ ID NOS: 170

SEQ ID NO 120

SEQ ID NO 120

LEATTH 225

CHARTH 225

CHARTH 225
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PRIOR APPLICATION NUMBER: 60/063120

PRIOR FILING DATE: 1997-10-24

PRIOR APPLICATION NUMBER: 60/063121

PRIOR FILING DATE: 1997-10-24

PRIOR FILING DATE: 1997-10-21

PRIOR FILING DATE: 1997-10-21

PRIOR FILING DATE: 1997-10-28

PRIOR FILING DATE: 1997-10-28
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100.0%; Pred. No. 4.9e-119;
:ive 0; Mismatches 0;
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Best Local Similarity 100.
Matches 225; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Homo Sapien
US-10-201-853-358
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Best Local Similarity
Matches 225; Conser
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Conservative
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; ORGANISM: Homo Sapien
US-10-063-513-120
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US-10-063-515-120
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Best Local Similarity
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                                                                                            Sequence 120, Application US/10063512;
Sequence 120, Application No. US20030018183A1
GENERAL INFORMATION:
HAPLICANT: Eaton, Dan L.
APPLICANT: Eaton, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Goddwski, Paul J.
APPLICANT: Godwski, Paul J.
APPLICANT: Godwski, Paul J.
APPLICANT: Godwski, Paul J.
APPLICANT: Gornel, Austin L.
APPLICANT: Matanabe, Colin K.
APPLICANT: Matanabe, Colin K.
APPLICANT: Matanabe, Colin K.
APPLICANT: ACOO, William I.
TITLE OF INVENTION: ACIDS ENCODING THE SAME
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3230R1C1
CURRENT FILING DATE: 2002-05-01
CURRENT FILING DATE: 2002-05-01
NUMBER OF SEQ ID NOS: 170
SEQ ID NO 120
LENGTH: 225
TYPE: PRT
                                          LALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL 120
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RMQCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL
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Pred. No. 4.9e-119;
0; Mismatches 0; Indels 0;
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US-10-063-513-120
; Sequence 120, Application US/10063513
; Publication No. US20030018172A1
; GENERAL INFORMATION:
; APPLICANT: Eaton, Dan L.
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
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ilarity 100.0%;
Conservative C
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US-10-063-512-120
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                                                                  RMOCKIYDSI
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Best Local Similarity
Matches 225; Conserv
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RMQCKIYDSI
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Publication No. US20030018173A1

GENERAL INFORMATION:

APPLICANT: Baton, Dan L.

APPLICANT: Gerritsen, Mary E.

APPLICANT: Gerritsen, Mary E.

APPLICANT: Godwski, Paul J.

APPLICANT: Grimaldi, Christopher J.

APPLICANT: Gurney, Austin L.

APPLICANT: Gurney, Austin L.

APPLICANT: Watanabe, Colin K.

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APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3230R1C1
CURRENT APPLICATION NUMBER: US/10/063,513
CURRENT FILING DATE: 2002-05-01
Prior Application removed - See File Wrapper or Palm NUMBER OF SEQ ID NOS: 170
SEQ ID NO 120
LENGTH: 225
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4.9e-119;
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Sequence 120, Application US/10063549

; Sequence 120, Application US/10063549
; Publication No. US20030027986A1
; GENERAL INFORMATION:
; APPLICANT: Baton, Dan L.
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Watenabe, Colin K.
; APPLICANT: Watenabe, Colin K.
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; TITLE OF INVENTION TOWNERR: US/10/063,549
; CURRENT FILING DATE: 2002-05-02
; Prior Application removed - See File Wrapper or Palm
; SEQ ID NO 120
; SEQ ID NO 120
; SEQ ID NO 120
; LENGTH: 225
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RMQCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL
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US-10-063-569-120
; Sequence 120, Application US/10063569
; Publication No. US20030018168A1
; GENERAL INFORMATION:
; APPLICANT: Eaton, Dan L.
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Godgard, Audrey
; APPLICANT: Grimaldi, Christopher J.
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CRGANISM: Homo
US-10-063-549-120
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US-10-063-549-120
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APPLICANT: Watanabe, Colin K.
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3230R1C1
CURRENT APPLICATION NUMBER: US/10/063,569
CURRENT FILING DATE: 2002-05-02
Prior Application removed - See File Wrapper or Palm NUMBER OF SEQ ID NOS: 170
SEQ ID NO 120
LENGTH: 225
                                                                                                                                                                                                                                                                                                                                                                       RMQCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL
                                                                                                                                                                                                                                                                                                                                                                                         121 TAGIIFIITGMVVLIPVSWVANAIRDFYNSIVNVAQKRELGEALYLGWTTALVLIVGGA
                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                100.0%; Score 1172; DB 12; Length 225; 100.0%; Pred. No. 4.9e-119; tive 0; Mismatches 0; Indels 0;
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le : 50 secs
                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 100.
Matches 225; Conservative
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15 ; Search time 19 Seconds
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Run on:

US-10-063-732-120 225 1 MATHALEIAGLFLGGVGMVG......QKSYHTGKKSPSVYSRSQYV 225 Title: Perfect score:

Sequence:

Gapop 60.0 , Gapext 60.0 OFIGO Scoring table:

389414 segs, 51625971 residues Searched:

9 Word size :

959 Total number of hits satisfying chosen parameters:

000000000 Minimum DB seq length: 0 Maximum DB seq length: 2 Post-processing: Listing first 45 summaries

Issued Patents AA:\*
1: /cgn2\_6/ptodata/2/iaa/5A\_COMB.pep:\*
2: /cgn2\_6/ptodata/2/iaa/5B\_COMB.pep:\*
3: /cgn2\_6/ptodata/2/iaa/6A\_COMB.pep:\*
4: /cgn2\_6/ptodata/2/iaa/6B\_COMB.pep:\*
5: /cgn2\_6/ptodata/2/iaa/PCTUS\_COMB.pep:\*
6: /cgn2\_6/ptodata/2/iaa/PcTUS\_COMB.pep:\* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

		%			SUMMAKLES	
Result No.	Score	Query Match	Length	DB	ID	Description
	103	45.8	113	4	-621-976-56	Semience 5695
7	თ	4.0	22	4	-09-205-258-869	9 0
M	Q	4.0	202	4	-09-205-258-34	344
4	ወ	4.0	N	4	-09-603-552-13	4 (*
2	6	•	247	4	-130-491-1	, in
9	8	3.6	N	4	-489-039A-	equence 1397
7	80	٠	N	4	1A-22	equence 223
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σ	7	3.1	18	ന	-940-095-22	equence 220
10	7	•	18	ന	-22	equence 226
11	7	3.1	18	m	0-096-22	equence 226.
12	7	•	18	m	-719-2	226.
13	7	3.1	18	4	-605-22	equence 2
14	7	•		4	-838-22	226.
15	7	3.1		4	US-08-940-136-226	equence 226,
16	7	•	18	4	05-258-87	equence 870,
L-1/-	7	•		4	-09-453-841-22	226,
	7	٠		4	-453-833-22	equence 22
) 61 6	7	٠		4	-09 - 45	equence 226,
20	7	3.1	83	4	-09-099-041A-	c
777	7	٠		4	-09-245-	33,
22	7	٠	89	41	-09-207-35	equence 33,
23	7	•		4	-09-340-	33,
24	7	٠	89	4	US-09-865-364-33	33,
25	7	H. K	66	4	-09-621-976-42	e 422
56	7	•	N	٦	-08-398-613	20,
27	7	•	123	Н	US-08-398-612A-20	Ŋ

Sequence 20, Appl Sequence 20, Appl Sequence 17, Appl Sequence 17, Appl Sequence 17, Appl Sequence 17, Appl Sequence 17, Appl Sequence 174, Appl Sequence 184, Appl Sequence 184, Appl Sequence 22, Appl Sequence 28, Appl Sequence 25, Appl
US-08-398-611A-20 US-08-491-334A-20 US-09-027-449-17 US-08-804-444A-17 US-09-026-985-17 US-09-121-952A-17 US-09-1312-952A-17 US-09-188-930-174 US-09-198-452A-184 US-09-663-600A-184 US-09-663-600A-186 US-09-663-600A-186 US-08-398-611A-28 US-08-398-611A-28 US-08-398-611A-28 US-08-398-611A-28 US-08-398-611A-28 US-08-398-611A-28 US-08-398-611A-28 US-08-398-611A-28 US-08-398-611A-28 US-08-398-611A-28 US-08-398-611A-28
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## ALIGNMENTS

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                                 Sequence 5695, Application US/09621976; Patent No. 6639063; GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Glordano, J.Y.
TITLE OF INVENTION: ESTE and Encoded Human Proteins.
FILE REFERENCE: GENSET.054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 5695
LENGTH: 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 45.8%; Score 103; DB 4; 1
Best Local Similarity 100.0%; Pred. No. 1.1e-91;
Matches 103; Conservative 0; Mismatches 0;
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Patent No. 6525174
GENERAL INFORMATION:
APPLICANT: Young et al.
TITLE OF INVENTION: 207 Human Secreted Proteins
FILE REFERENCE: PZ007P1
CURRENT APPLICATION NUMBER: US/09/205,258
CURRENT FILING DATE: 1998-12-04
EARLIER APPLICATION NUMBER: PCT/US98/11422
                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SIGNAL
LOCATION: -79...1
NAME/KEY: UNSURE
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US-09-621-976-5695
RESULT 1
US-09-621-976-5695
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US-09-205-258-869
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TITLE OF INVENTION: 207 Human Secreted Proteins
FILE REFERENCE: PZ007P1
CURRENT APPLICATION NUMBER: US/09/205,258
CURRENT FILING DATE: 1998-12-04
EARLIER APPLICATION NUMBER: PCT/US98/11422
EARLIER FILING DATE: 1998-06-04
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/048,880
EARLIER FILING DATE: 1997-06-06
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Pred. No. 0.09
0; Mismatches
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ER FILING DATE: 1997-06-06
ER FILING DATE: 1997-06-06
ER APPLICATION NUMBER: 60/048,895
ER FILING DATE: 1997-06-06
ER APPLICATION NUMBER: 60/048,894
ER FILING DATE: 1997-06-06
ER APPLICATION NUMBER: 60/048,971
ER FILING DATE: 1997-06-06
ER APPLICATION NUMBER: 60/048,964
ER FILING DATE: 1997-06-06
ER APPLICATION NUMBER: 60/048,899
ER FILING DATE: 1997-06-06
ER APPLICATION NUMBER: 60/048,899
ER FILING DATE: 1997-06-06
ER APPLICATION NUMBER: 60/048,893
ER FILING DATE: 1997-06-06
ER APPLICATION NUMBER: 60/048,893
ER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/070,923
EARLIER FILING DATE: 1997-12-18
EARLIER APPLICATION NUMBER: 60/092,921
EARLIER FILING DATE: 1998-07-15
EARLIER APPLICATION NUMBER: 60/094,657
EARLIER FILING DATE: 1998-07-30
NUMBER OF SEQ ID NOS: 1227
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 869
LENGTH: 22
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APPLICATION NUMBER: 60/048,915
FILING DATE: 1997-06-06
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Patent No. 6525174
GENERAL INFORMATION:
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100.0%; Pr
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                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Homo sapiens
US-09-205-258-869
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Best Local Similarity
Matches 9; Conserv
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Sequence 13977, Application US/09489039A
Patent No. 6610836
GENERAL INFORMATION:
APPLICANT: Gary Breton et. al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
TITLE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 2709.2004001
CURRENT APPLICATION NUMBER: US/09/489,039A
CURRENT FILING DATE: 2000-01-27
PRIOR APPLICATION NUMBER: US 60/117,747
PRIOR FILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 14342
SEQ ID NO 13977
LENGTH: 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15, Application US/09130491

Patent No. 6416974

GENERAL INFORMATION:

APPLICANT: Holtzman, Douglas A.

TITLE OF INVENTION: TANGO-71, TANGO-74, TANGO-76, AND TANGO-83

FILE REFERENCE: 09404/041001

CURRENT APPLICATION NUMBER: US/09/130,491

CURRENT FILING DATE: 1998-08-07

BARLIER PEPLICATION NUMBER: US 60/058,108

BARLIER APPLICATION NUMBER: US 60/058,108

BARLIER APPLICATION NUMBER: US 60/054,961

BARLIER FILING DATE: 1997-08-06

NUMBER OF SEQ ID NOS: 16

SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 15
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                                                                                                                                                                                               NAME/KEY: misc feature; OTHER INFORMATION: GenBank No. 6590089 g2570129
US-09-603-552-13
                                                                                                                                                                                                                                                                                                    Query Match
4.0%; Score 9; DB 4;
Best Local Similarity 100.0%; Pred. No. 0.78;
Matches 9; Conservative 0; Mismatches
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Mismatches
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ORGANISM: Klebsiella pneumoniae
                                                      PERL Program
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                       NUMBER OF SEQ ID NOS:
SOFTWARE:
SEQ ID NO 13
LENGTH: 220
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                   47 WEGLWMNCV 55
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ORGANISM: Homo sapiens
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Best Local Similarity
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US-09-489-039A-13977
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US-09-603-552-13
; Sequence 13, Application US/09603552
; Patent No. 6590089
; GENERAL INFORMATION:
; APPLICANT: Hillman, Jennifer L.
; APPLICANT: Tang, Y. Tom
; APPLICANT: Patterson, Chandra
; TITLE OF INVENTION: RVP-1 VARIANT DIFFERENTIALLY EXPRESSED IN CROHN'S DISEASE
; FILE REFERENCE: PC-0016 US
; CURRENT APPLICATION NUMBER: US/09/603,552
; CURRENT FILING DATE: 2000-06-22
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; LOCATION: (202)
; OTHER INFORMATION: Xaa equals stop translation
US-09-205-258-344
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; Pred. No. 0.7;
0; Mismatches
EARLIER APPLICATION NUMBER: 60/049,019
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/070,923
EARLIER APPLICATION NUMBER: 60/070,923
EARLIER APPLICATION NUMBER: 60/094,657
EARLIER APPLICATION NUMBER: 60/094,657
EARLIER APPLICATION NUMBER: 60/094,657
EARLIER FILING DATE: 1997-030
NUMBER: 60/094,657
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Similarity 100.0%; P
9; Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NO 344
TH: 202
: PRT
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Best Local S
Matches
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DB 4; Length 225;

Score 8;

Query Match

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Sequence 226, Application US/08940093
Sequence 226, Application US/08940093
Patent No. 6037323
GENERAL INFORMATION:
APPLICANT: Dasseux, Jean-Louis
APPLICANT: Sekul, Renate
APPLICANT: Buttner, Klaus
APPLICANT: Cornut, Isabelle
APPLICANT: Metz, Gunther
TITLE OF INVENTION: APOLIPOPROTEIN A-I AGONISTS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
NUMBER OF SEQUENCES: 258
CORRESPONDENCE ADDRESS:
GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Baseux, Jean-Louis

APPLICANT: Sekul, Renate

APPLICANT: Buttner, Klaus

APPLICANT: Buttner, Klaus

APPLICANT: Cornut, Isabelle

APPLICANT: Metz, Gunther

APPLICANT: Dufourcq, Jean

TITLE OF INVENTION: APOLIPOPROTEIN A-1 AGONISTS

TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS

NUMBER OF SEQUENCES: 258

CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA
ZIP: 10036-2811
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ VERSION 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/940,095
FILING DATE: 29-SEP-1997
CLASSIFICATION 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
APPLICATION NUMBER:
FILING DATE:
APPLICATION NUMBER:
FILING DATE:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 009196-000
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION NUMBER: 009196-000
TELECOMUNICATION NUMBER: 009196-000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.1%; Score 7; I
100.0%; Pred. No.
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STREET: 1155 Avenue of the Americas
CITY: New York
                                                                                                                                                                                                                                                                                                       ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: NY
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
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Best Local Similarity 100.
Matches 7; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
STRANDEDNESS: si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-940-093-226
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                                                                                                                                                                                                                                                       Sequence 22253, Application US/09252991A

Sequence 22253, Application US/09252991A

Patent No. 6551795

GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: ABRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142

SEQ ID NO 22253
LENGTH: 420
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                                         Indels
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; Pred. No. 35;
0; Mismatches
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100.0%; Pred. No. 13;
tive 0; Mismatches
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US-09-589-567-2
; Sequence 2, Application US/09589567
; Patent No. 6479730
; GENERAL INFORMATION:
; APPLICANT: Mahajan, Pramod B.
; TITLE OF INVENTION: Maize DNA Ligase II Ort;
; TITLE OF INVENTION: Thereof
; TITLE OF INVENTION: Thereof
; FILE REFERENCE: 1125
; CURRENT APPLICATION NUMBER: US/09/589,567
; CURRENT APPLICATION NUMBER: US 60/145,911
; PRIOR FILING DATE: 1999-07-27
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 1218
                 Pred. No. 7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for Windows Version 3.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Pseudomonas aeruginosa
               100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rvative
                     Best Local Similarity 100
Matches 8; Conservative
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Best Local Similarity
Matches 8; Conserv
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199 TTALVLIV
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; ORGANISM: Zea May;
US-09-589-567-2
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; Sequence 226, Appli
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US-09-252-991A-22253
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ATTORNEY/AGENT INFORMATION:
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; Sequence 226, Application US/08940096
; Patent No. 604616
; GENERAL INFORMATION:
APPLICANT: Baseux, Jean-Louis
APPLICANT: Sekul, Renate
APPLICANT: Buttner, Klaus
APPLICANT: Metz, Gunther
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
CORRESPONDENCES: 258
CORRESPONDENCES: 258
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
COUNTRY: USA
ZIP: 10036-2811
COUNTRY: USA
ZIP: 10036-2811
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
CORPUTER: IBM Compatible
CORPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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COUNTRY: USA
ZIP: 10086-2811
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/940,093
FILING DATE: 29-SEP-1997
CLASSIFICATION DATA:
APPLICATION NUMBER: 009196-0006-999
FILING DATE: 29-SEP-1997
CLASSIFICATION NUMBER: 30,742
NAME: COLUZZI, LAULTA A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 009196-0006-999
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION OF 226:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: No. 6037323e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 3;
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100.0%; Pred. No. 6.4
tive 0; Mismatches
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/940,096
FILING DATE: 29-SEP-1997
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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7 RELGEAL 13
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Best Local Similarity
Matches 7; Conser
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US-08-940-093-226
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US-08-940-096-226
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Patent No. 6265377
GENERAL INFORMATION:
APPLICANT: Dasseux, Jean-Louis
APPLICANT: Sekul, Renate
APPLICANT: Sekul, Renate
APPLICANT: Cornut, Isabelle
APPLICANT: Cornut, Isabelle
APPLICANT: Metz, Gunther
TITLE OF INVENTION: APOLIPOPROTEIN A-I AGONISTS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
NUMBER OF SEQUENCES: 258
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds LLP
                                                                                                                                                                                                                                                                                                                                                                                              ·;
                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                     Length 18;
                                    009196-0005-999
                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
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COUNTRY: USA
ZIP: 10036-2811
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/465,719
FILING DATE:
CLASSIFICATION BATA:
APPLICATION NUMBER: 08/940,093
FILING DATE:
CLASSIFICATION NUMBER: 08/940,093
FILING DATE: 29-SEP-1997
ATTORNEY/AGENT INFORMATION:
NAME: COLUZZI, LAURA A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 009196-000
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFHONE: 650-493-4935
TELEFAX: 650-493-5556
TELEFAX: 650-493-5556
TELEFAX: 650-493-5556
TELEFAX: 66141 PENNIE
SEQUENCE CHARACTERISTICS:
TENTORMATION FOR SEQ ID NO: 226:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 1155 Avenue of the Americas CITY: New York
REGISTRATION NUMBER: 30,742
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 0091
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-556
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 226:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.0%;
Matches 7; Conservative 0
                                                                                                                                                                                                                                       , MOLECULE TYPE: No. 6046166e
US-08-940-096-226
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STRANDEDNESS: sinc
TOPOLOGY: linear
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single
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STRANDEDNESS: sin
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Best Local Similarity
Matches 7; Conserv
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US-08-940-136-226
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                                                                                                                                                                                                                          Sequence 226, Application US/09453605
Sequence 226, Application US/09453605
Patent No. 6329341
GENERAL INFORMATION:
APPLICANT: Dasseux, Jean-Louis
Sekul, Renate
Buttner, Klaus
Cornut, Isabelle
Metz, Gunther
Dufourcq, Jean
TITLE OF INVENTION: APOLIPOPROTEIN A-I AGONISTS
NUMBER OF SEQUENCES: 258
                                                                 Gaps
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                                                               Indels
                           Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAMÉ: COTUZZÍ, LAURA A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 009196-0004-999
COMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
TELEFAX: 650-493-5556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM COMPATIBLE
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/453,605
FILING DATE: 26-No. 6329341-1999
CLASSIFICATION: <UNKNOWN>
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 08/940,095
FILING DATE: <UNKNOWN>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX.

TELEX.

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SEQUENCE CHARACTERISTICS:

LENGTH: 18 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: No. 6329341e

SEQUENCE DESCRIPTION: SEQ ID NO: 226:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.1%; Score 7; DB 4
100.0%; Pred. No. 6.4
cive 0; Mismatches
                              3.1%; Score 7; DB 3
100.0%; Pred. No. 6.4
iive 0; Mismatches
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COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
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Best Local Similarity 100.
Matches 7; Conservative
                                                                     Conservative
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                               Query Match
Best Local Similarity
Matches 7; Conserv
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US-09-453-605-226
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US-09-453-605-226
US-09-465-719-226
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Sequence 226, Application US/0945338

Parent No. 67745404

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APPLICANTS NET Network of the Americas
CITY, New York
SURTE: No COUNTRY, USA
COUNTRY, U
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RESULT 14 US-09-453-838-226

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ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: NA
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
COUNTRY: LOUGA-2811
COMPUTER READBLE FORM:
MEDIUM TYRE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: TEM COMPAT:
COMPUTER: 1 EM COMPAT:
COMPATING SYSTEM: US/08/940,136
FILING DATE: 2-526-1997
CLASSIFICATION NUMBER: 30,742
FILING DATE: 30,742
FRIEDRACTORY NUMBER: 30,742
FRIEDRACTORY NUM
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Search completed: September 1, 2004, 17:00:12 Job time : 21 secs

0;

Gaps

Length 18; 0; Indels

Query Match
3.1%; Score 7; DB 4;
Best Local Similarity 100.0%; Pred. No. 6.4;
Matches 7; Conservative 0; Mismatches

159 RELGEAL 165

|||||||| 7 RELGEAL 13

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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5 ; Search time 49 Seconds
(without alignments)
1444.651 Million cell updates/sec EIAGLFLGGVGMVG.....QKSYHTGKKSPSVYSRSQYV 225 1, 2004, 16:58:25 OM protein - protein search, using sw model US-10-063-732-120 225 1 MATHALEIAGLFLGGV September Title: Perfect score: Sequence: Run on:

OLIGO Gapop 60.0 , Gapext 60.0 Scoring table:

seqs, 314612898 residues 1297172 Searched:

9

Word size

Total number of hits satisfying chosen parameters: 000000000 Minimum DB seq length: 0 Maximum DB seq length: 2

Post-processing: Listing first 45 summaries

Database :

Published Applications AA:\*

| cgn2\_6/ptodata/1/pubpaa/US07\_PUBCOMB.pep:\*
| cgn2\_6/ptodata/1/pubpaa/PCT\_NEW\_PUB.pep:\*
| cgn2\_6/ptodata/1/pubpaa/US06\_NEW\_PUB.pep:\*
| cgn2\_6/ptodata/1/pubpaa/US06\_PUBGOMB.pep:\*
| cgn2\_6/ptodata/1/pubpaa/US08\_NEW\_PUB.pep:\*
| cgn2\_6/ptodata/1/pubpaa/US08\_NEW\_PUB.pep:\*
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| cgn2\_6/ptodata/1/pubpaa/US09A\_PUBCOMB.pep:\*
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| cgn2\_6/ptodata/1/pubpaa/US10B\_PUBCOMB.pep:\*
| cgn2\_6/ptodata/1/pubpaa/US10B\_PUBCOMB.pep:\* 

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Д	Seguence 405. App	~				358,	358	3,100	35.00	120	120.	120	000	001	-
SUMMARIES	ID	US-09-731-872-405	US-09-946-374-328	US-09-876-997-405	US-10-206-915-358	US-10-199-670-358	US-10-201-858-358	US-10-205-890-358	US-10-208-024-358	US-10-201-853-358	US-10-063-745-120	US-10-063-512-120	US-10-063-513-120	US-10-063-515-120	US-10-063-549-120	US-10-063-569-120
	DB	6	10	10	12	12	12	12	12	12	12	12	12	12	12	12
	Length	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225
%	Query Match	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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R APPLICATION NUMBER: 60/101068
R FILING DATE: 1998-09-18
R APPLICATION NUMBER: 60/101071
R FILING DATE: 1998-09-18
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R FILING DATE: 1998-09-22
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DR APPLICATION NUMBER: 60/100662

DR APPLICATION NUMBER: 60/100664

DR FILING DATE: 1998-09-16

DR FILING DATE: 1998-09-16

DR APPLICATION NUMBER: 60/100684

DR FILING DATE: 1998-09-17

DR APPLICATION NUMBER: 60/100684

DR FILING DATE: 1998-09-17

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DR APPLICATION NUMBER: 60/100710
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R APPLICATION NUMBER: 60/101472
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ILING DATE: 1998-09-24
APPLICATION NUMBER: 60/101916
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FILING DATE: 1998-09-29
APPLICATION NUMBER: 60/102240
FILING DATE: 1998-09-29
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APPLICATION NUMBER: 60/101743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-09-17
APPLICATION NUMBER: 60/100848
FILING DATE: 1998-09-18
APPLICATION NUMBER: 60/100849
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APPLICATION NUMBER: 60/100930
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                                                   FILING DATE: 1998-09-10
APPLICATION NUMBER: 60/099816
FILING DATE: 1998-09-10
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R APPLICATION NUMBER: 60/1
R FILING DATE: 1998-09-15
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FILING DATE: 1998-09-23
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FILING DATE: 1998-09-15
APPLICATION NUMBER: 60/
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APPLICATION NUMBER: 60
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                                                                     LFCCVFCCNEKSSSYRXSIPSHRITQKSYHTGKKSPSVYSRSQYV 225
                                                                                                     LFCCVFCCNEKSSSYRYSIPSHRTTQKSYHTGKKSPSVYSRSQYV
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; Bediserion No. US2003003129A1
; Bediserion No. US2003003129A1
; Bediserion No. US2003003129A1
; APPLICANT: Backer, Kevin P. APPLICANT: Backer, Loud APPLICANT: Bersoyers, Luc APPLICANT: Gederd, Audrey APPLICANT: Godderd, Audrey APPLICANT: Pann, Vamenein J. APPLICANT: Pann, Vamenein J. APPLICANT: Pann, Vamenein J. APPLICANT: Pann, Namenein J. APPLICANT: Pann, Namenein J. APPLICANT: Pann, Namenein J. APPLICANT: Namenein 
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60/101915

998-09-24

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| PRIOR APPLICATION WORKER: 60/10230
| PRIOR APPLICATION WORKER: 60/10230
| PRIOR APPLICATION WORKER: 60/10231
| PRIOR FILING DATE: 1398-19-29
| PRIOR FILING DATE: 1398-19-29
| PRIOR FILING DATE: 1398-19-20
| PRIOR FILING DATE: 1398-19-10-21
| PRIOR FILING DATE: 1398-10-20
| PRIOR PRIOR PRIOR DATE: 1398-10-20
| PRIOR PRIOR DATE:
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ALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL 120

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RESULT 3

US-09-876-997-405

US-09-876-997-405

Sequence 405, Application US/09876997

Publication No. US20030152921A1

GENERAL INFORMATION:

APPLICANT: Dumas Milne Edwards, Jean Baptiste

APPLICANT: Jobert, Severin

TITLE OF INVENTION: FULL-LENGTH HUMAN CDNAS ENCODING POTENTIALLY SECRETED PROTEINS

FILE REFERENCE: 78.US4.CIP

CURRENT APPLICATION NUMBER: US 09/731,872

PRIOR APPLICATION NUMBER: US 60/187,470

PRIOR FILING DATE: 2000-12-07

PRIOR APPLICATION NUMBER: US 60/169,629

PRIOR FILING DATE: 1999-12-08

NUMBER OF SEQ ID NOS: 482

SEQ ID NO 405

LENGTH: 225

MANDEL DATE: 225

MANDEL DATE: 225

MANDEL DATE: 225
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100.0%; Score 225; DB 10;
Best Local Similarity 100.0%; Pred. No. 1.1e-208;
Matches 225; Conservative 0; Mismatches 0;
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Publication No. US20040029221A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Baker, Kevin P.
APPLICANT: Chen, Jian
APPLICANT: Desnoyers, Luc
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Pan, James
APPLICANT: Watanabe, Colin K.
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US-09-876-997-405
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                                                          SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC ACIDS ENCODING THE SAME 3.0R1C513

NUMBER: US/10/206,915
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; Pred. No. 1.1e-208;
0; Mismatches 0;
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US-10-199-670-358
; Sequence 358, Application US/10199670
; Publication No. US20040033560A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Chen, Jian,
; APPLICANT: Goddard, Audrey
; APPLICANT: Goddard, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Smith, Victoria
; APPLICANT: Smith, Victoria
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Zhang, Zemin
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSM
APPLICANT: Mood, William I.
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANS
TITLE OF INVENTION: ACIDS ENCODING TH
FILE FEFERENCE: P3430R1C513
CURRENT APPLICATION NUMBER: US/10/206,
CURRENT FILING DATE: 2002-07-26
PRIOR APPLICATION NUMBER: 10/052586
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-10-24
PRIOR FILING DATE: 1997-10-28
PRIOR PILING DATE: 1997-10-28
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tty 100.0%; 1
servative 0;
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Best Local Similarity
Matches 225; Conserv
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; ORGANISM: H
US-10-206-915-3
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121 TAGIIFIITGMVVLIPVSWVANAIIRDFYNSIVNVAQKRELGEALYLGWTTALVLIVGGA 180
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APPLICANT: Smith, Victoria
APPLICANT: Watanabe, Colin K.
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3430R1C464
CURRENT APPLICATION NUMBER: US/10/201, 858
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FILE REFERENCE: 100 MUMBER: US/10/199,670
CURRENT APPLICATION NUMBER: US/10/199,670
CURRENT FILING DATE: 2002-07-19
PRIOR APPLICATION NUMBER: 10/052586
PRIOR FILING DATE: 1997-09-18
PRIOR PILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059266
PRIOR PILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/062250
PRIOR PILING DATE: 1997-10-17
PRIOR PILING DATE: 1997-10-24
PRIOR FILING DATE: 1997-10-28
PRIOR FILING DATE: 225

SEQ ID NO 358
LUMBER OF SEQ ID NOS: 612
LUMBER OF SEQ ID NOS: 612
LUMBER OF SEQ ID NOS: 612
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Godowski, Paul J.
Gurney, Austin L.
Pan, James
Smith, Victoria
Watanabe, Colin K.
Wood, William I.
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US-10-205-890-358

i Sequence 359, Application US/10205890

j Publication No. US20040048334A1

j GENERAL INFORMATION:
   APPLICANT: Baker, Kevin P.
   APPLICANT: Chen, Jian
   APPLICANT: Godowski, Paul J.
   APPLICANT: Godowski, Paul J.
   APPLICANT: Godowski, Paul J.
   APPLICANT: Godowski, Paul J.
   APPLICANT: Watanabe, Colin K.
   APPLICANT: Watana
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CURRENT FILING DATE: 2002-07-23

PRIOR APPLICATION NUMBER: 10/052586

PRIOR FILING DATE: 2002-01-15

PRIOR PILING DATE: 1997-09-18

PRIOR PLILING DATE: 1997-09-18

PRIOR PLILING DATE: 1997-09-18

PRIOR PLILING DATE: 1997-09-18

PRIOR PLILING DATE: 1997-10-17

PRIOR PLILING DATE: 1997-10-24

PRIOR FILING DATE: 1997-10-28

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Pred. No. 1.1e-208;
0; Mismatches 0;
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Best Local Similarity
Matches 225; Conser
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0-201-858-358
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WES-10-208-024-358

Sequence 358, Application US/10208024

Septicant: Only US20040048335A1

APPLICANT: Chen, Jian P.

APPLICANT: Goddard, Audrey

APPLICANT: Goddard, Audrey

APPLICANT: Goddard, Audrey

APPLICANT: Fan, James

APPLICANT: Fan, James

APPLICANT: Watanabe, Colin K.

APPLICANT: Watanabe, Colin K.

APPLICANT: Watanabe, Colin K.

APPLICANT: Watanabe, Colin K.

APPLICANT: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

TITLE OF INVENTION: SECRETED AND THE SAME

TITLE OF INVENTION: MUMBER: US/10/208,024

CURRENT FILING DATE: 2002-07-29

PRIOR FILING DATE: 1997-09-18

PRIOR FILING DATE: 1997-09-18

PRIOR FILING DATE: 1997-09-18

PRIOR FILING DATE: 1997-09-18
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PRIOR FILING DATE: 1997-09-18

PRIOR FILING DATE: 1997-09-18

PRIOR FILING DATE: 1997-09-18

PRIOR FILING DATE: 1997-09-18

PRIOR APPLICATION NUMBER: 60/062250

PRIOR FILING DATE: 1997-10-17

PRIOR FILING DATE: 1997-10-24

PRIOR FILING DATE: 1997-10-24

PRIOR FILING DATE: 1997-10-24

PRIOR FILING DATE: 1997-10-24

PRIOR PILING DATE: 1997-10-28

PRIOR PILING DATE: 1997-10-28

PRIOR PPLICATION NUMBER: 60/063541

PRIOR PILING DATE: 1997-10-28

PRIOR FILING DATE: 1997-10-28

PRIOR PILING DATE: 1997-10-28
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Best Local Similarity 100.0%; Pred. No. 1.1e-208;
Matches 225; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Homo Sapien
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1 MATHALBIAGLFLGGVGMVGTVAVTVMPQWRVSAFIENNIVVFENFWEGLWMNCVRQANI
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US-10-063-745-120
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APPLICANT: Baker, Kevin P.
APPLICANT: Chen, Jian
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Audrein L.
APPLICANT: Fan, James
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
APPLICANT: Wood, William I.
APPLICANT: Anany, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
TITLE OF INVENTION: ACIDS ENCODING THE SAME
TITLE OF INVENTION NUMBER: US/10/201,853
CURRENT APPLICATION NUMBER: 10/052586
PRIOR APPLICATION NUMBER: 60/059263
PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059266
PRIOR APPLICATION NUMBER: 60/059266
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PRIOR FILING DATE: 1997-09-18

PRIOR APPLICATION NUMBER: 60/062250

PRIOR FILING DATE: 1997-10-17

PRIOR APPLICATION NUMBER: 60/063120

PRIOR FILING DATE: 1997-10-24

PRIOR FILING DATE: 1997-10-24

PRIOR FILING DATE: 1997-10-24

PRIOR FILING DATE: 1997-10-24

PRIOR FILING DATE: 1997-10-28

PRIOR PILING DATE: 1997-10-28

PRIOR FILING DATE: 1997-10-28

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PRIOR PRIOR FILING DATE: 1997-10-28

PRIOR PRIOR PRIOR FILING DATE: 1997-10-28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
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ty 100.0%; Pred. No. 1
ervative 0; Mismatche
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US-10-201-853-358
Sequence 358, Application US/10201853
Publication No. US20040053358A1
GENERAL INFORMATION:
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US-10-208-024-358
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Best Local Simi
Matches 225;
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TYPE: PRT
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Sequence 120, Application US/10063745
; Sequence 120, Application US/10063745
; Publication No. US20040058411A1
; GENERAL INFORMATION:
; APPLICANT: Eaton, Dan L.
; APPLICANT: Goddard, Audrey
; APPLICANT: Goddard, Audrey
; APPLICANT: Goddard, Audrey
; APPLICANT: Goddard, Audrey
; APPLICANT: Goddard, Austin L.
; APPLICANT: Goddard, Austin L.
; APPLICANT: Watanabe, Colin K.
APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; TITLE OF INVENTION NUMBER: US/10/063,745
; CURRENT APPLICATION NUMBER: US/202-05-09
; CURRENT APPLICATION TEMOVED - See Palm OF File Wrapper
; NUMBER OF SEQ ID NOS: 170
; SEQ ID NO 120
; LENGTH: 225
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1.1e-208;
es 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 225;
PRIOR APPLICATION NUMBER: 60/063120
PRIOR FILING DATE: 1997-10-24
PRIOR PILING DATE: 1997-10-24
PRIOR APPLICATION NUMBER: 60/063121
PRIOR FILING DATE: 1997-10-24
PRIOR FILING DATE: 1997-10-21
PRIOR FILING DATE: 1997-10-28
PRIOR FILING DATE: 207-10-28
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100.0%; Pred. No. 1.1e-208;
ative 0; Mismatches 0;
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Best Local Similarity 100.
Matches 225; Conservative
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; ORGANISM: Homo Sapien
US-10-063-745-120
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US-10-201-853-358
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APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Watanabe, Colin K.
APPLICANT: Watanabe, Colin K.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3230RIC1
CURRENT APPLICATION NUMBER: US/10/063,513
CURRENT PILING DATE: 2002-05-01
NUMBER OF SEQ ID NOS: 170
SEQ ID NO 120
SEQ ID NO 120

"MUMBER OF SEQ ID NOS: 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 120, Application US/10063515
; Sequence 120, Application US/10063515
; Publication No. US20030018173A1
; GENERAL INFORMATION:
; APPLICANT: Eaton, Dan L.
; APPLICANT: Goddard, Audrey
; APPLICANT: Goddwski, Paul J.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurmaldi, Christopher J.
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; TITLE OF INVENTION NUMBER: US/10/063,515
; CURRENT FILLING DATE: 2002-05-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 RMQCKIYDSLLALSPDLQAARGLMCAASVMSFLAFWMAILGMKCTRCTGDNEKVKAHILL
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Pred. No. 1.1e-208;
0; Mismatches 0;
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NUMBER OF SEQ ID NOS: 170
SEQ ID NO 120
LENGTH: 225
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100.0%; Pred. No. 1.1e-208;
iive 0; Mismatches 0;
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Best Local Similarity 100.
Matches 225; Conservative
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; ORGANISM: Homo Sapien
US-10-063-513-120
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US-10-063-515-120
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APPLICANT: Falvaroff, Ellen
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Godowski, Paul J.
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
TITLE OF INVENTION: BECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3230R1C1
CURRENT APPLICATION NUMBER: US/10/063,512
CURRENT APPLICATION LEMOVED - See File Wrapper or Palm
SEQ ID NO 120
LENGTH: 225
TYPE: PRT
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ilarity 100.0%; Pred. No. 1.1e-208;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; Sequence 120, Application US/10063512; Publication No. US20030018183A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 12
US-10-063-513-120
; Sequence 120, Application US/10063513
; Publication No. US20030018172A1
; GENERAL INFORMATION:
; APPLICANT: Eaton, Dan L.
; APPLICANT: Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , Ellen
, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sapien
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APPLICANT: Filvaroff,
APPLICANT: Gerritsen,
APPLICANT: Goddard, An
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LFCCVFCCN
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Best Local Similarity
Matches 225; Conser
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.0-063-512-120
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US-10-063-512-120
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US-10-063-49-120

is Sequence 120, Application US/10063549

is Publication No. US2003027986A1

is APPLICANT: Baton, Dan L.

is APPLICANT: Gerritsen, Mary E.

APPLICANT: Godwski, Paul J.

APPLICANT: Godwski, Paul J.

APPLICANT: Grimaldi, Christopher J.

APPLICANT: Granado, Colin K.

APPLICANT: Granado, Colin K.

APPLICANT: Watanabo, Colin K.

APPLICANT: Wood, William I.

APPLICANT: Wood
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RMOCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL
                         61 RMQCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNBKVKAHILL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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Pred. No. 1.1e-208;
; Mismatches 0;
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APPLICANT: Baton, Dan L.

APPLICANT: Filvaroff, Ellen

APPLICANT: Gerritsen, Mary E.

APPLICANT: Goddard, Audrey

APPLICANT: Godowski, Paul J.

APPLICANT: Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Sci
100.0%; Pritive 0;
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US-10-063-569-120
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APPLICANT: Gurney, Austin L.
APPLICANT: Watanabe, Colin K.
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3230R1C1
CURRENT APPLICATION NUMBER: US/10/063,569
CURRENT FILING DATE: 2002-05-02
Prior Application removed - See File Wrapper or Palm NUMBER OF SEQ ID NOS: 170
SEQ ID NO 120
LENGTH: 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 TAGIIFIITGMVVLIPVSWVANAIIRDFYNSIVNVAQKRELGEALYLGWTTALVLIVGGA
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ne : 50 secs
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; ORGANISM: Homo Sapien
US-10-063-569-120
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version -
GenCore
Copyright (c) 1993
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- protein search, using sw model OM protein Run on:

9; Search time 42 Seconds (without alignments) 1690.276 Million cell updates/sec 1, 2004, 16:56:09 September

US-10-063-732-120 225 1 MATHALEIAGLFLGGVGMVG.....QKSYHTGKKSPSVYSRSQYV 225 Title: Perfect score: Sequence:

Scoring table:

OLIGO Gapop 60.0 , Gapext 60.0

seqs, 315518202 residues 1017041 Searched:

Word size

Total number of hits satisfying chosen

parameters:

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

summaries Post-processing: Listing first 45

SPTREMBL 25:\* Database :

sp\_archea:\*
sp\_bacteria:\*
sp\_fungi:\*
sp\_human:\*
sp\_invertebrate:\*
sp\_mammal:\*
sp\_mammal:\*
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sp\_plant:\*
sp\_rodent:\*
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sp\_virus:\*
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sp\_vartebrate:\*
sp\_vartebrate:\* 11... 12... 11... 11... 11... 11... 11... 11...

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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Length 209; Indels

Query Match 5.3%; Score 12; DB 13; Le Best Local Similarity 100.0%; Pred. No. 0.0017; Matches 12; Conservative 0; Mismatches 0;

υq	Q99Kf8 mus musculu Q97fg9 clostridium Q9hkt2 thermoplasm Q818c7 ceratopteri	Q8xh76 clostridium Q7x509 streptomyce Q8ytv2 anabaena sp Q8pdj7 xanthomonas		Veujci agrobacteri Q988is rhizobium l Q85fll adiantum ca Q9k235 chlamydia p Q8idk0 plasmodium Q8rii5 methylococc	Q91180 streptomyce Q7z4y7 homo sapien Q7zts2 brachydanio Q90xs1 brachydanio
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Q8LQE6 Q89C03 Q56233 Q86KM9	099KF8 097F09 09HKT2 08L8C7 094MT4	Q8XH76 Q7X509 Q8YTV2 Q8PDJ7	Q9Y9R3 Q9Z9Z0 Q9AEG4 Q9HWS4 Q81UB9	Q98815 Q98815 Q85F11 Q9K235 Q8IDK0 Q8RJI5	Q9L180 Q7Z4Y7 Q7ZTS2 Q90XS1 Q90XR4
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## ALIGNMENTS

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PEQUENCE FROM N.A.

SEQUENCE FROM N.A.

MEDLINE=21417738; PubMed=11517306;

A Kollmar R., Nakamura S.K., Kappler J.A., Hudspeth A.J.;

Kollmar R., Nakamura S.K., Kappler J.A., Hudspeth A.J.;

Kollmar R., Nakamura S.K., Kappler J.A., Hudspeth A.J.;

Expression and phylogeny of claudins in vertebrate primordia.";

Expression and phylogeny of claudins in vertebrate primordia.";

Expression and phylogeny of claudine.

RemBL; AF359425; AAL01832.1; -.

REMBL; AF359425; AAL01832.1; -.

REMBL; AF359425; AAL01832.1; -.

REMBL; AF359425; Cinembrane; IEA.

GO; GO:0016020; C:membrane; IEA.

RO; GO:0016020; C:membrane; IEA.

RO; GO:0016020; C:membrane; IEA.

RO; GO:0016020; C:membrane; IEA.

RO; GO:0016020; Restructural molecule activity; IEA.

InterPro; IPR006189; Claudin.

RITHERPRO; IPR004031; PMP22 Claudin.

REPINTS; PR01077; CLAUDIN.

REPINTS; PR011746; CLAUDIN.

REPROSITE; PS011346; CLAUDIN; 1.

REPROSITE; PS011346; CLAUDIN; 1.

REPROSITE; PS011346; CLAUDIN; 1.
                                                                                                                                         Claudin e.
Claudin e.
CLDNE.
Brachydanio rerio (Zebrafish) (Danio rerio).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
NCBI TaxID=7955;
                                                             O90XR9;
01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
                                             209
                                             PRT;
                                          PRELIMINARY;
RESULT 1
                      Q90XR9
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SEQUENCE FROM N.A.
STRAIN=C57BL/6J; TISSUE=Head;
MEDLINE=22354683; PubMed=12466851;
The FANTOM Consortium,
the RIKEN Genome Exploration Research Group Phase I & II Team;
"Analysis of the mouse transcriptome based on functional annotation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLDN5.
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
Gallus.
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01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 25, Last annotation update)
Similar to claudin-17.
Mus musculus (Mouse).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Musinse; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.

Reardon E., Kojima S., Rizzolo L.J.;

Reardon E., Kojima S., Rizzolo L.J.;

T. "Sequence of chick claudin-5 cDNA.";

L. Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.

EMBL; AF334678; AAK20877.1; -.

RO; GO:0016020; C:membrane; IEA.

GO; GO:0005923; C:tight junction; IEA.

GO; GO:0005198; F:structural molecule activity; IEA.

RILETPRO; IPR006189; Claudin.

RILETPRO; IPR006189; Claudin.

RILETPRO; PR00822; PMP22 Claudin.

REAM; PF00822; PMP22 Claudin.

REAM; PF00822; PMP22 Claudin.

REAM; PF00822; PMP22 Claudin.
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                                                                                                                           DB 13; Length 214; . 1.7;
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; 23180 MW; 5037A882DFF5433A CRC64;
                                                                        A2540116CBD53978 CRC64;
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01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Claudin-5.
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100.0%; Pred. No. 1.6
tive 0; Mismatches
                                                                                                                             Query Match 4.0%; Score 9; DB 1
Best Local Similarity 100.0%; Pred. No. 1.7
Matches 9; Conservative 0; Mismatches
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Pfam; PF00822; PMP22_Claudin; 1. PRINTS; PR01077; CLAUDIN. PROSITE; PS01346; CLAUDIN; 1. SEQUENCE 214 AA; 23090 MW; A
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Best Local Similarity
Matches 9; Conserv
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OBSR2;

O1-JUN-2001 (TrEMBirel. 17, Last sequence update)

O1-JUN-2003 (TrEMBirel. 24, Last annotation update)

O1-JUN-2003 (TrEMBirel. 24, Last annotation update)

Claudin-3.

CLDN3.

Gallus gallus (Chicken).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Archosauria; Aves; Neognathae; Galliformes; Phasianidae;

Gallus.

NCBI TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EQUENCE FROM N.A.

XX MEDLINE=21417738; PubMed=11517306;
XA Collmar R., Nakamura S.K., Kappler J.A., Hudspeth A.J.;
XA MEDLINE=21417738; PubMed=11517306;
XA Nollmar R., Nakamura S.K., Kappler J.A., Hudspeth A.J.;
XI MEDLINE=21417738; PubMed=11517306;
XI MALL, Acad. Sci. U.S.A. 98:10196-10201(2001).

BRID AF359434; AALO1841.1; -.

DR GO; GO:0005923; C:membrane; IEA.

DR GO; GO:0005923; C:tight junction; IEA.

DR GO; GO:0005198; F:structural molecule activity; IEA.

DR GO; GO:0005198; F:structural molecule activity; IEA.

DR HITEPPO; IPR006187; Claudin.

DR InterPro; IPR006187; Claudin.

DR InterPro; IPR00622; PMP22 Claudin.

DR PEMITS; PR01077; CLAUDIN; 1.

DR PROSITE; PS01346; CLAUDIN; 1.

SO SEQUENCE 214 AA; 22788 MW; 38163AB7ESOBF058 CRC64;
                                                                                                                                       RESULT 2

Q90XR0
ID Q90XR0
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-UUN-2003 (TrEMBLrel. 24, Last annotation update)
DT 01-UUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Claudin h.
GN CLDNH.
OS Brachydanio rerio (Zebrafish) (Danio rerio).
OC Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC Cyprinidae; Danio.
OC Cyprinidae; Danio.
OC Cyprinidae; Danio.
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Reardon E., Kojima S., Rizzolo L.J.;

Reardon E., Kojima S., Rizzolo L.J.;

Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.

EMBL; AF334677; AAK20876.1; -.

GO; GO:0016020; C:membrane; IEA.

GO; GO:0005923; C:tight junction; IEA.

GO; GO:0005198; F:structural molecule activity; IEA.

R InterPro; IPR006187; Claudin.

R InterPro; IPR004031; PMP22_Claudin.
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100.0%; Pred. No. 1.7;
ive 0; Mismatches 0; Indels
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SEQUENCE FROM N.A.

TISSUE=Dorsal lip;

WEDLINE=21098758; PubMed=11161574;

Brizuela B.J., Wessely O., De Robertis E.M.;

Brizuela B.J., Wessely O., De Robertis E.M.;

Randomization of the Left-Right Body Axis.";

Randomization of the Left-Right Body Axis.";

Bev. Biol. 230:217-229(2001).

R AG0; GO:0016020; C:membrane; IEA.

GO; GO:0005923; C:tight junction; IEA.

GO; GO:0005923; C:tight junction; IEA.

GO; GO:0005923; C:tight junction; IEA.

R HINTERPROSEL PROGELS Claudin.

R HINTERPROSEL PROGELS Claudin.

R PRINTS; PROJECT CLAUDIN.
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P Fujita M., Itoh M., Shibata M., Taira S., Taira M.;

T "Gene expression pattern analysis of the tight junction protein,

T Claudin, in the early morphogenesis of Xenopus embryos.";

I Gene Expr. Patterns 2:23-26(2002).

EMBL; AR359435; AAL01842.1;

EMBL; AR559435; AAL01842.1;

R GO; GO:0016020; C:membrane; IEA.

R GO; GO:0005923; C:tight junction; IEA.

R GO; GO:0005198; F:structural molecule activity; IEA.

InterPro; IPR006187; Claudin.

R InterPro; IPR004031; PMP22_Claudin.

Pfam; PF00822; PMP22_Claudin; 1.

R PRINTS; PR01077; CLAUDIN.
    Xenopus laevis (African clawed frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
Xenopodinae; Xenopus.
NCBI_TaxID=8355;
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01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Claudin A (Claudin4L1).
CLDNA OR CLDN4L1.
Xenopus laevis (African clawed frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
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MEDLINE=21417738; PubMed=11517306;
Kollmar R., Nakamura S.K., Kappler J.A., Hudspeth A.J.;
"Expression and phylogeny of claudins in vertebrate primordia.";
Proc. Natl. Acad. Sci. U.S.A. 98:10196-10201(2001).
                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE; PS01346; CLAUDIN; 1.
SEQUENCE 214 AA; 23151 MW; 3F0D65E3ADE311E6 CRC64;
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100.0%; Pred. No. 17;
ative 0; Mismatches (
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P Fujita M., Itoh M., Shibata M., Taira S., Taira M.;

T Gene expression pattern analysis of the tight junction protein,

Claudin, in the early morphogenesis of Xenopus embryos.";

Claudin, in the early morphogenesis of Xenopus embryos.";

EMBL; AB072909; BAC21014.1;

R GO; GO:0016020; C:membrane; IEA.

R GO; GO:0005923; C:tight junction; IEA.

R GO; GO:0005198; F:structural molecule activity; IEA.

R GO; GO:0005198; F:structural molecule activity; IEA.

R InterPro; IPR006188; Claudin.

R InterPro; IPR004031; PMP22 Claudin.

R Flam; PF00822; PMP22 Claudin, 1.

R PRINTS; PR01077; CLAUDIN.

R PROSITE; PS01346; CLAUDIN; 1.
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01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 25, Last annotation update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Claudin4L2.
CLDN4L2.
Xenopus laevis (African clawed frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae; NCBI_TaxID=8355;
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Pred. No. 17;
0; Mismatches 0; Indels
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60,770 full-length cDNAs.";
Nature 420:563-573(2002).
EMBL, AK048287; BAC33296.1; -.
GO; GO:0016020; C:membrane; IEA.
GO; GO:0005923; C:tight junction; IEA.
GO; GO:0005198; F:structural molecule activity; IEA.
InterPro; IPR006187; Claudin.
InterPro; IPR004031; PMP22 Claudin.
Pfam; PF00822; PMP22 Claudin.
PRINTS; PR01077; CLAUDIN.
PROSITE; PS01346; CLAUDIN; 1.
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24653 MW; 6E049CE63AB60A34 CRC64;
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O9DE12;
O1-MAR-2001 (TrEMBLrel. 16, Created)
O1-MAR-2001 (TrEMBLrel. 16, Last sequence update)
O1-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Transmembrane tight junction protein claudin.
CLA.
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01-JUN-2003
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STRAIN=CT18; PLASMID=pHCM1;
MEDLINE=21534947; PubMed=11677608;
Parkhill J., Dougan G., James K.D., Thomson N.R., Pickard D., Wain J.,
Churcher C., Mungall K.L., Bentley S.D., Holden M.T.G., Sebaihia M.,
Baker S., Basham D., Brooks K., Chillingworth T., Connerton P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.

MEDLINE=20280091; PubMed=10773089;
Sherburne C.K., Lawley T.D., Gilmour M.W., Blattner F.R., Burland V., Grotbeck E., Rose D.J., Taylor D.E.;
"The complete DNA sequence and analysis of R27, a large IncHI plasmid from Salmonella typhi that is temperature sensitive for transfer.";
Nucleic Acids Res. 28:2177-2186(2000).
EMBL; AF250878; AAF69870.1; -.
GO; GO:0046821; C:extrachromosomal DNA; IEA.
Hypothetical protein; Plasmid.
SEQUENCE 261 AA; 29233 MW; CIB12E63D3C86C16 CRC64;
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01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
TrhE (Putative pilus assembly protein).
TRHE OR HCM1.70.
Salmonella typhi.
Plasmid R27, and Plasmid pHCM1.
Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
Enterobacteriaceae; Salmonella.
NCBI TaxID=601;
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the IncHI1 plasmid R27.";
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Plasmid R27.
Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
Enterobacteriaceae; Salmonella.
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     Score 8; DB 1:
Pred. No. 17;
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100.0%; Pred. No. 21;
cive 0; Mismatches
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MEDLINE=99296679; PubMed=10366528;
Rooker M.M., Sherburne C., Lawley T.D.,
"Characterization of the Tra2 region of Plasmid 41:226-239(1999).
                                                                                                                                                                                                                                                      Created)
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Q9L5U5
ID Q9L5U5
AC Q9L5U5,
DT 01-OCT-2000 (TrEMBLrel. 15, C)
DT 01-OCT-2000 (TrEMBLrel. 15, L)
DT 01-OCT-2003 (TrEMBLrel. 15, L)
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Matches 8; Conservative
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Galagan J.E., Nusbaum C., Roy A., Endrizzi M.G., Macdonald P.,
Galagan J.E., Nusbaum C., Roy A., Endrizzi M.G., Macdonald P.,
RitzHugh W., Calvo S., Engels R., Smirnov S., Atnoor D., Brown A.,
Allen N., Naylor J., Stange-Thomann N., DeArellano K., Johnson R.,
Linton L., McEwan P., McKernan K., Talamas J., Tirrell A., Ye W.,
A Leigh J.A., Li W., Liu J., Cann I., Graham D.E., Grahame D.A., Guss A.M.,
Leigh J.A., Li W., Liu J., Wukhopadhyay B., Reeve J.N., Smith K.,
Leigh J.A., Li W., Liu J., White O., White R.H., de Macario E.C.,
Springer T.A., Umayam L.A., White O., White R.H., de Macario E.C.,
Rerry J.G., Jarrell K.F., Jing H., Macario A.J.L., Paulsen I.,
Rerry J.G., Jarrell K.F., Swanson R.V., Zinder S.H., Lander E.,
Metcalf W.W., Birren B.;
"The genome of Methanosarcina acetivorans reveals extensive metabolic
and physiological diversity.";
Genome Res. 12:532-542(2002).
RMBL; AE010823; AAM04952.1; -.
WHypothetical protein; Complete proteome.
Rypothetical protein; Complete proteome.
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Cronin A., Davis P., Davies R.M., Dowd L., White N., Farrar J.,

Reltwell T., Hamlin N., Haque A., Hien T.T., Holroyd S., Jagels K.,

Krogh A., Larsen T.S., Leather S., Moule S., O'Gaora P., Parry C.,

A Quail M., Rutherford K., Simmonds M., Skelton J., Stevens K.,

Mhitehead S., Barrell B.G.;

"Complete genome sequence of a multiple drug resistant Salmonella
"Complete genome sequence of a multiple drug resistant Salmonella
"The terica serovar Typhi CT18.";

Inature 413:848-852(2001).

EMBL; AF105019; AAD54051.1; -.

REMBL; AL513383; CAD09678.1; -.

RO; GO:0046821; C:extrachromosomal DNA; IEA.

RO; GO:0046821; C:extrachromosomal DNA; IEA.

SEQUENCE 265 AA; 29763 MW; AE66D5B0C9ECF9C7 CRC64;
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Methanosarcinales; Methanosarcinaceae; Methanosarcina.
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01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Hypothetical protein MA1538.
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Pred. No. 24;
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100.0%; Pred. No. 21;
ative 0; Mismatches
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MEDLINE=21929760; PubMed=11932238;
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100.0%; Pre
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SEQUENCE FROM N.A.
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SEQUENCE 460 AA
                InterPro;
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Q81EE6
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                                                                                                                                                                                 STRAIN-USDA 110;

STRAIN-USDA 110;

Kaneko T., Nakamura Y., Sato S., Minamisawa K., Uchiumi T.,

Raneko T., Nakamura Y., Iriguchi M., Kawashima K.,

Raneko T., Watanabe A., Idesawa K., Iriguchi M., Kawashima K.,

Rohara M., Matsumoto M., Shimpo S., Tsuruoka H., Wada T., Yamada M.,

Tabata S.;

"Complete genomic sequence of nitrogen-fixing symbiotic bacterium

Bradyrhizobium japonicum USDA110.";

DNA Res. 9:189-197(2002).

EMBL; AP005962; BAC52858.1;

BRI, AP005962; Chembrane; IEA.

GO; GO:0016428; F:type I protein secretor activity; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 S.L.,
A.-B.,
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MEDLINE=22608414; PubMed=12721629;

Read T.D., Peterson S.N., Tourasse N., Baillie L.W., Paulsen I.T.,

Read T.D., Peterson S.N., Tourasse N., Baillie L.W., Paulsen I.T.,

Nelson K.E., Tettelin H., Fouts D.E., Eisen J.A., Gill S.R.,

Holtzapple E.K., Okstad O.A., Helgason E., Rilstone J., Wu M.,

Kolonay J.F., Beanan M.J., Dodson R.J., Brinkac L.M., Gwinn M.,

DeBoy R.T., Madpu R., Daugherty S.C., Durkin A.S., Haft D.H.,

Nelson W.C., Peterson J.D., Pop M., Khouri H.M., Radune D.,

Benton J.L., Mahamoud Y., Jiang L., Hance I.R., Weidman J.F.,

A Berry K.J., Plaut R.D., Wolf A.M., Watkins K.L., Nierman W.C.,

Hazen A., Cline R., Redmond C., Thwaite J.E., White O., Salzberg S.L.,

Thomason B., Friedlander A.M., Koehler T.M., Hanna P.C., Kolsto A.-B.,

Friese C.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
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                                                                                       teria, Alphaproteobacteria, Rhizobiales;
Bradyrhizobium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 16; Length 393;
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S; Bacillales; Bacillaceae; Bacillus.
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Q81RJ5;
O1-JUN-2003 (TrEMBLrel. 24, Created)
O1-JUN-2003 (TrEMBLrel. 24, Last sequence update)
O1-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Polysaccharide biosynthesis family protein.
BA2049.
Bacillus anthracis (strain Ames).
Bacteria; Firmicutes; Bacillales; Bacillus NCBI TaxID=198094;
 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GO, GO:0016020; C:membrane; IEA.
GO, GO:0003676; F:nucleic acid binding; IEA.
GO, GO:0000271; P:polysaccharide biosynthesis; IEA.
InterPro; IPR002797; Polysacc svnt
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100.0%; Pred. No. 29;
vative 0; Mismatches
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 01-OCT-2003 (TrEMBLrel. 25, Last
Multidrug resistance efflux pump.
BLR7593.
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Nature 423:81-86(2003).
EMBL; AE017030; AAP25937.1;
TIGR; BA2049;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13; Hlyb.
7; Rtxb.
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                                                                                   Bacteria, Proteobacteria,
Bradyrhizobiaceae, Bradyrł
NCBI_TaxID=375,
                                                             Bradyrhizobium japonicum
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InterPro; IPR003997,
Pfam; PF00529; HlyD,
PRINTS; PR01490; RT3
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8; Conserv
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SDA 110;
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SEQUENCE
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Matches 8
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Q81RJ5
ID Q81RJ
DC Q81RJ
DT Q1-JU
DT 01-JU
DE BACIO
RA BACIO
RA MEDLI
RA Read
RA Nelso
RA HAZEN
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Fanconi anemia protein E (Fanconi anemia, complementation group (DJ109F14.5).
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                                                                                                                                              Length 459;
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100.0%; Pred. No. 33;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bacillus cereus (strain ATCC 14579 / DSM 31).
Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              460 AA; 50684 MW; 8A5568EC9EB045E5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Export protein for polysaccharides and teichoic acids.
BC2034.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nature 423:87-91(2003).

Nature 423:87-91(2003).

EMBL; AE017004; AAP09003.1; -.

GO; GO:0016020; C:membrane; IEA.

GO; GO:0000271; P:polysaccharide biosynthesis; IEA.

InterPro; IPR002797; Polysacc_synt.

InterPro; IPR00504; RNA_rec_mot.

Pfam; PF01943; Polysacc_synt; 1.

PROSITE; PS00030; RRM_RNP_1; 1.
                                                                                          50450 MW; 8FECC87C3E51CBAE
                                                                                                                                       Score 8; DB 16;
Pred. No. 33;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                   460 AA
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100.0%; Pre
0; 7
Pfam; PF01943; Polysacc synt; 1 PROSITE; PS00030; RRM_RNP_1; 1. Complete proteome.
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Best Local Similarity 100...
8; Conservative
                                                                                                                                                                                  8; Conservative
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                                                                                                                                   Query Match
Best Local Similarity
Matches 8; Conserv
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RP SEQUENCE FROM N.A.

RX MEDIINE=26489873; PubMed=11001585;
RA de Winter J.P., Leveille F., van Berkel C.G.M., Rooimans M.A.,
RA de Winter J.P., Leveille F., van Berkel C.G.M., Rooimans M.A.,
RA de Winter J.P., Leveille F., van Berkel C.G.M., Raisfisz Q.,
RA Benovaa-Collins L., Lightfoot J., Leegwater P.A., Waisfisz Q.,
RA Komatsu K., Arvert F., Pronk J.C., Mathew C.G., Digweed M.,
RA Gonatsu K., Arvert F., Pronk J.C., Mathew C.G., Digweed M.,
RA Buchwald M., Joenje H.;
RY Taclation of a CDNA representing the Fanconi anemia complementation
RT Group E gene.";
RA J. Hum. Genet. 67:1306-1308(2000).
RY TSSUE-SPR.
RA J. SEGUENCE FROM N.A.
RY SEGUENCE FROM N.A.
RY SEGUENCE FROM N.A.
RA Philips S.;
RA Strausberg R.;
RA SEGUENCE FROM N.A.
RA Philips S.;
RA SEGUENCE FROM N.A.
RA PAHASSSSI;
RA SEGUENCE FROM N.A.
RA PHILIPS S.;
RA SEGUENCE FROM N.A.
RA PHILIPS S.;
RA SEGUENCE FROM N.A.
RA PHILIPS S.;
RA SEGUENCE S.S. S
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Search completed: September 1, 2004, 16:59:28 Job time: 46 secs

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5.1.6
Compugen Ltd.
GenCore version (c) 1993 - 2004
          Copyright
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- protein search, using sw model OM protein

0 ; Search time 16 Seconds (without alignments) 1352.693 Million cell updates/sec 2004, 16:56:30 ٦ September Run on:

US-10-063-732-120 225 1 MATHALEIAGLFLGGVGMVG......QKSYHTGKKSPSVYSRSQYV 225 Title: Perfect score: Sequence:

Scoring table:

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283366 Searched:

seqs, 96191526 residues

9 Word size :

1068 Total number of hits satisfying chosen parameters:

2000000000 Minimum DB seq length: Maximum DB seq length: Post-processing: Listing first 45 summaries

Database :

PIR 78:\*
1: pir1:\*
2: pir2:\*
3: pir3:\*
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

		Description	androgen-withdrawa	probable miltifunc			С	hetical	hypothetical prote	. –	. –		, 5		fysh protein (1700c	herical	4 ~	dooxiecical ploce	Conserved himsthat	himothetian myporner		parhogonomia 2.2.	Consorted himsthat	hypothetical prote	transmembrane line		N-acetyl cases	N-acetyl gamma-gra	alwoon transfer of	yezecezectan hvnothetical prote	cell division prot
SOMETHIS	į.	ID 	94	T39650	F45268	097228	T11448	G69811	AD2132	E72531	21	D86511	A83134	25	G97359	E81559	383772	156168	B89789	AC1919	82028	334801	83423	7494	B69653	AD2130	876613	AB2248	AF2994	98289	F83094
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probable membrane hynothetical prote	hypothetical prote	two-component sens	probable membrane	probable coproporp	xanthine/uracil re	hynothetical prote	hypotherical prote	Conserved hymothet	nrohable arobo nro	dlutamine syntheta	probable sugar tra	soding/proton pati	CalB protein - Ara
AE0121 E83530	T16773	D82975	ALUYUY	G82431	E81141	T16835	E72682	B70205	C70574	E69368	AF0117	F83418	T50526
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3.1	т. г.	٦. ۲.	٠. ۲۰	. H	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
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#### ALIGNMENTS

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Androgen-withdrawal apoptosis protein RVP1, prostatic - rat androgen-withdrawal apoptosis protein RVP1, prostatic - rat (5.5pecies: Rattus norvegicus (Norway rat)
C.5pecies: Rattus norvegicus (Norway rat)
C.5pecies: Rattus norvegicus (Norway rat)
C.5Accession: A39484
R.5Briehl, M.M.; Miesfeld, R.L.
Mol. Endocrinol. 5, 1381-1388, 1991
A;Title: Isolation and characterization of transcripts induced by androgen withdrawal and A;Reference number: A39484; MUID:92130987; PMID:1723140
A;Reference number: A39484
A;Rocession: A39484
A;Rocession: A39484
A;Rocession: A39484
A;Cross-references: GB:M74067; NID:g205857; PIDN:AA41760.1; PID:g205858
C;Genetics:
A;Cenetics:
A;Gene: RVP.1
C;Superfamily: rat androgen-withdrawal apoptosis protein RVP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 280;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.0%; Score 9; DB 2;
ilarity 100.0%; Pred. No. 0.58;
Conservative 0; Mismatches
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Best Local Similarity
Matches 9; Conserv
RESULT 1
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#### 52 54 47 WEGLWINCV 46 WEGLWMNCV ð 임

RESULT 2 T39650

0

Gaps

0

Probable multifunctional folic acid synthesis protein - fission yeast (Schizosaccharomyc Probable multifunctional folic acid synthase (N)Alternate names: dihydropterate synthase (N)Alternate names: dihydropterate synthase (EC 4.1.2.25); dihydropteroate synthase (EC 5.1.2.3); dihydropteroate synthase (EC 2.5.1.3); Ribmited to the EMBL Data Library, October 1998

A;Reference number: 221868

A;Reference number: 221868

A;Reference number: 221868

A;Residues: 1-686 <LYN>

A;Residues: 1-680 <LYN>

A;Residu

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3.1%; S
100.0%;
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Best Local Similarity 100.
Matches 7; Conservative
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Best Local Similarity
Matches 7; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                              170 TTALVLI 176
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AD2132
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D97228
hypothetical protein CAC2668 [imported] - Clostridium acetobutylicum
C;Species: Clostridium acetobutylicum
C;Species: 14-Sep-2001 #sequence_revision 14-Sep-2001 #text_change 14-Sep-2001
C;Accession: D97228
R;Nolling, J; Breton, G.; Omelchenko, M.V.; Markarova, K.S.; Zeng, Q.; Gibson, R.; Lee,
J. Daly, M.J; Bennett, G.N.; Koonin, E.V.; Smith, D.R.
J. Bacteriol. 183, 4823-4838, 2001
A;Title: Genome Sequence and Comparative Analysis of the Solvent-Producing Bacterium Cld
A;Title: Genome Sequence and Comparative Analysis of the Solvent-Producing Bacterium
A;Reference number: A96900; MUD:21359325; PMID:21359325
A;Accession: D97228
A;Status: preliminary
A;Molecule type: DNA
A;Status: 1-75 <KUR>
A;Cross-references: GB:AE001437; PIDN:AAK80615.1; PID:G15025698; GSPDB:GN00168
A;Experimental source: Clostridium acetobutylicum ATCC824
C;Genetics:
A;Gene: CAC2668
                                                                                                                                                                                                                                                                                                                                                                                                                  encoding Mn-superoxide dismutase and
A;Map position: 2
C;Superfamily: fasB-fasC-fasD multifunctional enzyme; 2-amino-4-hydroxy-6-hydroxymethyld
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                                    gy
C; Keywords: aldehyde-lyase; carbon-carbon lyase; transferase
C; Keywords: dihydroneopterin aldolase homology <DHA1>
F;6-122/Domain: dihydroneopterin aldolase homology <DHA2>
F;253-385/Domain: 2-amino-4-hydroxy-6-hydroxymethyldihydropteridine pyrophosphokinase
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                                                                                                                                   DB 2;
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100.0%; Pred. No. 12;
ive 0; Mismatches
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Best Local Similarity 100.
Matches 8; Conservative
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NAMES chaydrogenase (ubiquinome) (EC 1.6.5.3) chain 3 - mine-handed armadillo mitochoodr Cignecis malcofondation Desyma november (mister and the mitochoodrodinome) besyma november (mister and the mitochoodrodinome) and the mitochoodrodinome) and the mitochoodrodinome (mister and the mitochoodrodinome) and the mitochoodrodinome (mister and mitochoodrodinome (mister and mitochoodrodinome) and the mitochoodrodinome (mister and mitochoodrodinome (mister and mitochoodrodinome) and the mitochoodrodinome (mister and mitochoodr
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RESULT 12
AH2577
conserved hypothetical protein fxsA [imported] - Agrobacterium tumefaciens (strain C58,
                        C;Genetics:
A;Gene: CPn0164
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hypothetical protein all2611 [imported] - Nostoc sp. (strain PCC 7120)
C; Species: Nostoc sp. PCC 7120
A;Note: Nostoc sp. PCC 7120
C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Dec-2002
C;Accession: AD2132
R;Kaneko, T: Makamura, Y: Wolk, C.P.; Kuritz, T:; Sasamoto, S.; Watanabe, A.; Iriguchi Nakazaki, N: Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Yasuda, M.; Tabata, S. A;Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Ana A;Recession: AD2132
A;Accession: AD2132
A;Status: preliminary
A;Molecule type: DNA
A;Recessides: 1-148 <a href="https://docs.id/">kURD</a>
A;Status: preliminary
A;Molecule type: DNA
A;Experimental source: Strain PCC 7120
C;Genetics:
A;Genetics:
A;Genetics:
A;Genetics:
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B72112
hypothetical protein - Chlamydophila pneumoniae (strain CWL029)
C;Species: Chlamydophila pneumoniae, Chlamydia pneumoniae
C;Date: 23-Apr-1999 #sequence_revision 23-Apr-1999 #text_change 05-May-2000
C;Accession: B72112
R;Kalman, S.; Mitchell, W.; Marathe, R.; Lammel, C.; Fan, J.; Olinger, L.; Grimwood, J.;
Nature Genet. 21, 385-389, 1999
A;Title: Comparative genomes of Clamydia pneumoniae and C. trachomatis.
A;Reference number: A72000; MUID:99206606; PMID:10192388
A;Accession: B72112
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-167 <ARN>
A;Residues: 1-167 <ARN>
A;Experimental source: strain CWL029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: DDBJ:AP000063; NID:g5105654; PIDN:BAA81237.1; PID:d1045023; PID:g510
A;Experimental source: strain K1
C;Genetics:
A;Gene: APE2225
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Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sequence of an aerobic hyper-thermophilic Crenarchaeon, Aeropys
(50; MUID:99310339; PMID:10382966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 8
B72531
hypothetical protein APE2225 - Aeropyrum pernix (strain K1)
C;Species: Aeropyrum pernix
C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 20-Aug-1999
C;Accession: E72531
R;Kawarabayasi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y.; Jin-no, Kawa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazak DNA Res. 6, 83-101, 1999
A;Title: Complete genome sequence of an aerobic hyper-thermophilic Crenarchaeon, A;Reference number: A72450; MUID:99310339; PMID:10382966
A;Accession: E72531
A;Accession: E72531
A;Residues: 1-156 <KAW>A;Residues: 1-156 <KAW>A;Residues: 1-156 <KAW>A;Residues: 1-156 <KAW>A;Residues: 1-156 <KAW>A;Residues: 1-156 <KAWA
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s; Pred. No. 36;
0; Mismatches
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Mismatches
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7ative 0; Mismatcl
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|150 KRELGEA 156
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51 ALSPDLQ 5
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RESULT 11
A83134

conserved hypothetical protein PA4104 [imported] - Pseudomonas aeruginosa (strain PAO1)
C;Species: Pseudomonas aeruginosa
C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 31-Dec-2000
C;Accession: A83134
R;Stover, C.K.; Pham, X.Q.; Erwin, A.L.; Mizoguchi, S.D.; Warrener, P.; Hickey, M.J.; Br adman, S.; Yuan, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.R.; Kas, A.; Larbig, K.; Lim, J. Lory, S.; Olson, M.V.
Nature 406, 959-964, 2000
A;Title: Complete genome sequence of Pseudomonas aeruginosa PA01, an opportunistic pathc A;Reference number: A82950; MUID:20437337; PMID:10984043
A;Tatle: Complete genome Sequence of Pseudomonas aeruginosa PA01, an opportunistic pathc A;Reference number: A82950; MUID:20437337; PMID:10984043
A;Residues: 1-169 csTO>
A;Residues: 1-169 csTO>
A;Residues: 1-169 csTO>
A;Coss-references: GB:AE004826; GB:AE004091; NID:g9950296; PIDN:AAG07491.1; GSPDB:GN001
C;Genetics:
A;Gene: PA4104
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D86511
hypothetical protein CPj0164 [imported] - Chlamydophila pneumoniae (strain c) Species: Chlamydophila pneumoniae, Chlamydia pneumoniae
C; Species: Chlamydophila pneumoniae, Chlamydia pneumoniae
C; Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 02-Mar-2001
C; Accession: D86511
R; Shirai, M.; Hirakawa, H.; Kimoto, M.; Tabuchi, M.; Kishi, F.; Ouchi, K.; Nucleic Acids Res. 28, 2311-2314, 2000
A; Title: Comparison of whole genome sequences of chlamydia pneumoniae J138.
A; Reference number: A86491; MUID:20330349; PMID:10871362
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A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-167 <STO>
A;Cross-references: GB:BA000008; NID:g8978537; PIDN:BAA98374.1;
A;Experimental source: strain J138
C;Genetics:
A;Gene: CPj0164
           Length 167;
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       Score 7; DB 2;
Pred. No. 38;
); Mismatches
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Pred. No. 38;
0; Mismatches
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100.0%; Pred. No. 38;
tive 0; Mismatches
     3.1%;
ilarity 100.0%;
Conservative 0
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Best Local Similarity 100.0%;
Matches 7; Conservative C
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Best Local Similarity 100.
Matches 7; Conservative
Query Match
Best Local Similarity
Matches 7; Conserva
                                                                                                        175 LIVGGAL 181
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C;Species: Agrobacterium tunnefaciens
C;Species: Agrobacterium tunnefaciens
C;Species: Agrobacterium tunnefaciens
C;Date: 30-Sep-2001 #sequence_revision 30-Sep-2001 #text_change 18-Nov-2002
C;Accession: G97359
C;Accession: G97359
R;Goodner, P.; Mollam, C.; Allinger, M.; Doughty, D.; Scott, C.; Lappas, C.; Markelz, B.;
A; Liu, F.; Wollam, C.; Allinger, M.; Doughty, D.; Scott, C.; Lappas, C.; Markelz, B.;
Science 294, 2323-2328, 2001
A;Title: Genome Sequence of the Plant Pathogen and Biotechnology Agent Agrobacterium tunny
A;Reference number: A97359; MUID:21608551; PMID:11743194
A;Reference number: A97359; MUID:21608551; PMID:11743194
A;Residues: 1-178 <KUR>
A;Residues: 1-178 <KUR>
A;Residues: 1-178 <KUR>
A;Residues: 1-178 <KUR>
A;Genetics:
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A;Genetiamily: Escherichia coli hypothetical protein b4140
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E81559

hypothetical protein CP0607 [imported] - Chlamydophila pneumoniae (strain AR39)

C;Species: Chlamydophila pneumoniae, Chlamydia pneumoniae

C;Species: Chlamydophila pneumoniae, Chlamydia pneumoniae

C;Accession: E81550

C;Accession: E81550

B;Read, T.D.; Brunham, R.C.; Shen, C.; Gill, S.R.; Heidelberg, J.F.; White, O.; Hickey, C.; Dodson, R.; Gwinn, M.; Nelson, W.; DeBoy, R.; Kolonay, J.; McClarty, G.; Salzberg, Nucleic Acids Res. 28, 1397-1406, 2000

A;Title: Genome sequences of Chlamydia trachomatis MoPn and Chlamydia pneumoniae AR39.

A;Reference number: A81500; MUID:20150255; PMID:10684935
                                                                                                                         J.C.; Kaul, R.; Monks, D.; Chen, L.; Wood, G.E.; Chen, Y.; Woo, I. Grant, C.; Guenthner, D.; Kutyavin, T.; Levy, R.; Li, M.; McClell; Zhang, S.
C;Species: Agrobacterium tumefaciens
C;Date: 11-Jan-2002 #sequence_revision 11-Jan-2002 #text_change 18-Nov-2002
C;Date: 11-Jan-2002 #sequence_revision 11-Jan-2002 #text_change 18-Nov-2002
C;Accession: AH2577
R;Wood, D.W.; Setubal, J.C.; Kaul, R.; Monks, D.; Chen, L.; Wood, G.E.; Chen, Y.; Woo, erage, G.; Gillet, W.; Grant, C.; Guenthner, D.; Kutyavin, T.; Levy, R.; Li, M.; McClel; Karp, P.; Romero, P.; Zhang, S.
Science 294, 2317-2323, 2001
A;Authors: Yoo, H.; Tao, Y.; Biddle, P.; Jung, M.; Krespan, W.; Perry, M.; Gordon-Kamm,
                                                                                                                                                                                                                                                         ster, E.W.

A;Title: The Genome of the Natural Genetic Engineer Agrobacterium tumefaciens C58.

A;Accession: AH2577

A;Status: preliminary

A;Molecule type: DNA

A;Esidues: 1-178 <KUR>
A;Esperimental source: strain C58 (Dupont)

C;Genetics:
C;Gen
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A;Map position: circul
C;Superfamily: Escheri
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A;Status: preliminary
A;Molecule type: DNA
A;Rolecule type: DNA
A;Residues: 1-185 <REA>
A;Cross-references: GB:AE002218; GB:AE002161; NID:g7189509; PIDN:AAF38423.1; PID:g718951
A;Experimental source: strain AR39, HL cells
C;Genetics:
A;Gene: CP0607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hypothetical protein BH0979 [imported] - Bacillus halodurans (strain C-125)
C;Species: Bacillus halodurans
C;Species: Bacillus halodurans
C;Species: Bacillus halodurans
C;Species: O1-Dec-2000 #sequence_revision 01-Dec-2000 #text_change 15-Jun-2001
C;Accession: C83772
R;Takami, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Masui, N.; Fuji, F.; HirstTakami, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Masui, N.; Fuji, F.; HirstTakami, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Masui, N.; Fuji, F.; HirstTakeides Complete genome sequence of the alkaliphilic bacterium Bacillus halodurans and A;Reference number: A83650; MUID:20512582; PMID:11058132
A;Reference number: A83650; MUID:20512582; PMID:310173440; PIDN:BAB04698.1; GSPDB:GN00A; Experimental source: strain C-125
C;Genetics:
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5.1.6 Compugen Ltd. GenCore version Copyright (c) 1993 - 2004

OM protein - protein search, using sw model

Run on:

September 1, 2004, 16:55:44 ; Search time 12 Seconds
 (without alignments)
 976.315 Million cell updates/sec

Title: US-10-063-732-120
Perfect score: 225
Sequence: 1 MATHALEIAGLFLGGVGMVG......QKSYHTGKKSPSVYSRSQYV 225

OLIGO Gapop 60.0 , Gapext 60.0 Scoring table:

141681 seqs, 52070155 residues Searched:

Total number of hits satisfying chosen parameters: 9 Word size :

608

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

SwissProt\_42:\*

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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## ALIGNMENTS

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                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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SEQUENCE FROM N.A.

MEDLINE=99110921; PubMed=9892664;

Morita K., Furuse M., Fujimoto K., Tsukita S.;

Morita K., Furuse M., Fujimoto K., Tsukita S.;

"Claudin multigene family encoding four-transmembrane domain protein components of tight junction strands.";

Proc. Natl. Acad. Sci. U.S.A. 96:511-516(1999).
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Component of tight junction (TJ) strands.
AR LOCATION: Integral membrane protein.
Y: Belongs to the claudin family.
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. 39, Last sequence update)
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InterPro; IPR006187; Claudin. InterPro; IPR006188; Claudin. Ffam; PF00822; PMP22 Claudin. PRINTS; PR01077; CLAUDIN. PROSITE; PS01346; CLAUDIN; Indition; Transmembrane.
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CLD8 MOUSE
ID CLD8 MOUSE
AC Q92260;
DT 30-MAY-2000 (
DT 30-MAY-2000 (
DT 10-OCT-2003 (
DD CLDN8.
GN CLDN8.
GN MUS MUSCULUS
OC MAMMALIA; EUL
OX MAMMALI
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TISSUE=Breast tumor;

MEDLINE=22388257; PubMed=12477932;

MEDLINE=22388257; Manch N.K., Former A.A., Rubin G.M., Hong L., Frange C., Brangelon M., Machan M., Malek J.A., Gunarathe P.H., Rochards S., Worley K.C., Hale S., Garcia A.M., Galbs R.A., Vollalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Vollalon D.K., Machan M., Rodrigues S., Sanchez A., Schein J.E., Schevchenko Y., Bouffard G.G., Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Mhiting M., Madan A., Young A.C., Shevchenko Y., Smailus D.E., Schnerriel A. Schein J.E., Jones S.J.M., Marra M.A.;

MILLEFIELD A. Schein J.E., Jones S.J.M., Marra M.A.;

MEDLINGELLULAR LOCATION: Integral membrane protein.

--- SUBCELLULAR LOCATION: Integral membrane protein.

--- SIMILARITY: Belongs to the claudin family.
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30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
Claudin-like protein ZF-A89.
Brachydanio rerio (Zebrafish) (Danio rerio).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
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Pred. No. 1e-05;
); Mismatches 0; Indels
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EMBL, BC003868; AAH03868.1; -.
MGD; MGI:1859286; Cldn8.
InterPro; IPR006187; Claudin.
InterPro; IPR006188; Claudin.
Pfam; PF00822; PMP22 Claudin.
Pfam; PF00822; PMP22 Claudin.
PRINTS; PR01077; CLAUDIN.
PROSITE; PS01346; CLAUDIN.
Tight junction; Transmembrane.
TRANSMEM

8 28 POTENTIA.
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Best Local Similarity 100.
Matches 13; Conservative
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                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
                                                                                                                                                                 statement is not removed. Usage by and for commercial a license agreement (See http://www.isb-sib.ch/announce/o license@isb-sib.ch).
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MEDLINE=97242441; PubMed=9087440;
Katahira J., Inoue N., Horiguchi Y., Matsuda M., Sugimoto N.;
Molecular cloning and functional characterization of the receptor for Clostridium perfringens enterotoxin.";
J. Cell Biol. 136:1239-1247(1997).
-!- FUNCTION: Component of tight junction (TJ) strands.
-!- FUNCTION: LOCATION: Integral membrane protein.
-!- SUBCELLULAR LOCATION: Integral membrane protein.
-!- SIMILARITY: Belongs to the claudin family.
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Chordata; Craniata; Vertebrata; Euteleostomi;
Primates; Catarrhini; Cercopithecidae;
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30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
30-MAY-2000 (Rel. 39, Last annotation update)
Claudin-4 (Clostridium perfringens enterotoxin receptor)
receptor) (CPE-R).
CLDN4 OR CPETR1 OR CPER.
Cercopithecus aethiops (Green monkey) (Grivet).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleosto Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                         4.4%; Score 10; DB 1; Length 208; 100.0%; Pred. No. 0.013; live 0; Mismatches 0; Indels
           SEQUENCE FROM N.A.

Keen T.J., Inglehearn C.F.;
Submitted (OCT-1998) to the EMBL/GenBank/DDBJ databases.

-!- FUNCTION: Component of tight junction (TJ) strands.

-!- SUBCELLULAR LOCATION: Integral membrane protein.

-:- SUBCELLULAR LOCATION: Integral membrane protein.
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InterPro; IPR006187; Claudin.
InterPro; IPR005411; Claudin2.
InterPro; IPR006188; Claudin reg.
InterPro; IPR004031; PMP22 Claudin.
Pfam; PF00822; PMP22 Claudin.
PRINTS; PR01077; CLAUDIN.
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InterPro; IPR005411; Claudin.
InterPro; IPR006188; Claudin.
InterPro; IPR004031; PMP22 Claudin regint PF00822; PMP22 Claudin; IPRINTS; PR01077; CLAUDIN.
PRINTS; PR01589; CLAUDIN.
PROSITE; PS01346; CLAUDIN; I.
Tight junction; Transmembrane.
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208 AA;
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NCBI_TaxID=7955
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AC O19005;
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SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

TISSUE=Colon;

X MEDLINE=22388257; PubMed=12477932;

X Alausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

X Alackoul S.F., Zeeberg B., Buelcow K.H., Schaefer C.F., Bhat N.K.,

X Alschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

X Alschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

X Alschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

X Alschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

X Astapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

X Astapleton M., Soares M.B., Proshlyuki S., Carninci P., Prange C.,

X Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

R Asha S.S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

X Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

X Nilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

X Nilalon D.K., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

X Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

X Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

X Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

X Generation and initial analysis of more than 15,000 full-length

X Thuman and mouse cDNA sequences.";
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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014493;
30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
Claudin-4 (Clostridium perfringens enterotoxin receptor)
receptor) (CPE-R) (Williams-Beuren syndrome chromosome region 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE=Fetal brain;
MEDLINE=97476271; PubMed=9334247;
Katahira J., Sugiyama H., Inoue N., Horiguchi Y., Matsuda M.,
Sugimoto N.;
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474DB3099F95289E CRC64;
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entities requires a license agreement (or send an email to license@isb-sib.ch)
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                                                             EMBL, D88492; BAA22781.1; -.
InterPro; IPR006187; Claudin.
InterPro; IPR006188; Claudin.
InterPro; IPR004031; PMP22 Claudin.
Pfam; PF00822; PMP22 Claudin; 1.
PRINTS; PR01077; CLAUDIN.
Ight junction; Transmembrane.
Tight junction; Transmembrane.
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Best Local Similarity 100.00
Lag 9; Conservative
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161 1
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210 AA;
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                                                                                                                                                                                                                                                                                                  This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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272:26652-26658(1997).
  Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
-!- FUNCTION: Component of tight junction (TJ) strands.
-!- SUBCELLULAR LOCATION: Integral membrane protein.
-!- DISEASE: Haploinsufficiency of CLDN4 may be the cause of certain cardiovascular and musculo-skeletal abnormalities observed in Williams-Beuren syndrome (WBS), a rare developmental disorder. It is a contiguous gene deletion syndrome involving genes from chromosome band 7q11.23.
-!- SIMILARITY: Belongs to the claudin family.
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30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
Claudin-4 (Clostridium perfringens enterotoxin receptor) (CPE-receptor) (CPE-R).
CLDN4 OR CPETR1 OR CPER.
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Musinae; Musi
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F:transmembrane receptor activity; TAS.
P:pathogenesis; TAS.
6187; Claudin.
5188; Claudin reg.
4031; PMP22 Claudin.
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0659A93AA5F0E4C5 CRC64;
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se M., Fujimoto K., Tsukita S.;
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0. 0.14;
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Mismatches
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MEDLINE=97476271; PubMed=9334247;
Katahira J., Sugiyama H., Inoue N.,
Sugimoto N.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; AB000712; BAA22984.1; -...EMBL; BC000671; AA400671.1; -...Genew; HGNC:2046; CLDN4.

MIM, 602909; -...GO; GO:0005887; C:integral to pla GO; GO:0004888; F:transmembrane JGO; GO:0009405; P:pathogenesis; 7 InterPro; IPR006187; Claudin. Egy InterPro; IPR006188; Claudin. Egy InterPro; IPR004031; PMP22 Claudin Feam; PF00822; PMP22 Claudin; 1...PRINTS; PR01077; CLAUDIN, 1...PROSITE; PS01346; CLAUDIN; 1...Tight junction; Transmembrane; W. TRANSMEM 82 102 POTITRANSMEM 118 138 POTITRANSMEM 161 181 POTITRANSMEM 161 POTITRANSMEM POTITRANSMEM 161 POTITRANSMEM 161 POTITRANSMEM 161 POTITRANSMEM POTITRANSME
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[2]
SEQUENCE FROM N.A
MEDLINE=99110921;
Morita K., Furuse
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J. Biol. Chem. 2
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CLD4_MOUSE
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                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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"Claudin multigene family encoding four-transmembrane domain protein components of tight junction strands.";
Proc. Natl. Acad. Sci. U.S.A. 96:511-516(1999).
-!- FUNCTION: Component of tight junction (TJ) strands.
-!- SUBCELLULAR LOCATION: Integral membrane protein.
-!- SIMILARITY: Belongs to the claudin family.
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Carnivora; Fissipedia; Canidae; Canis.
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MEDLINE=21206012; PubMed=11309408;
Furuse M., Furuse K., Sasaki H., Tsukita S.;
Furuse M., Furuse K., Sasaki H., Tsukita S.;
"Conversion of zonulae occludentes from tight to leaky strand tintroducing claudin-2 into Madin-Darby canine kidney I cells.";
J. Cell Biol. 153:263-272(2001).
-!- FUNCTION: Component of tight junction (TJ) strands.
-!- SUBCELLULAR LOCATION: Integral membrane protein.
-!- SIMILARITY: Belongs to the claudin family.
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100.0%; Pred. No. 0.14;
ive 0; Mismatches
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28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
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EMBL; AF087822; AAD09757.1; -.
MGD; MGI:1313314; Cldn4.
InterPro; IPR006187; Claudin.
InterPro; IPR004031; PMP22 Claudin.
Pfam; PF00822; PMP22 Claudin.
PRINTS; PR01077; CLAUDIN.
PROSITE; PS01346; CLAUDIN; 1.
Tight junction; Transmembrane.
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9; Conservative
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REPLINE=22388257; PubMed=12477932;
REDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schemen C.M., Schuler G.D.,
RA Altschul S.F., Jordan H., Moore T., Max S.L., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Stapleton M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McBwan P.J., McKernan K.J., Maramson R.D., Mullahy S.J.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia B.M., Gay L.J., Hulyk S.W.,
RA Pihey J., Helton B., Sodergren E.J., Lu X., Gibbs R.A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Boutfard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R., Wang Y.K., Kaplan P., Francke U., receptor (CPETR1) and the human homolog of RVP1. zed within the Williams-Beuren syndrome deletion.";
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Rođentia; Sciurognathi; Muridae; Murinae; Mus
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42, Last annotation update)
dium perfringens enterotoxin receptor 2)
2).
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100.0%; Pred. No. 0.1
ive 0; Mismatches
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EMBL; AF358908; AAK51434.1; -.
InterPro; IPR006187; Claudin.
InterPro; IPR006188; Claudin reg.
InterPro; IPR004031; PMP22 Claudin.
Pfam; PF00822; PMP22 Claudin; 1.
PRINTS; PR01077; CLAUDIN.
PROSITE; PS01346; CLAUDIN; 1.
Tight junction; Transmembrane.
TRANSMEM
9 29 POTENTIA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PubMed=9878248;
                                                                                                                                                                                                     23148 MW;
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Paperna T., Peoples R., War
"Genes for the CPE receptor
(CPETR2) are localized with
Genomics 54:453-459(1998).
                                                                                                                                                                                                                                                  Similarity 100
9; Conservative
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180
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CLDN3 OR CPETR2.
Mus musculus (Mouse).
Eukaryota; Metazoa; CP
Mammalia; Eutheria; Rc
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TRANSMEM
SEQUENCE
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Best Local &
Matches
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CLD3_MOUSE
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
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MEDLINE=92130987; PubMed=1723140;
Briehl M.M., Miesfeld R.L.;
"Isolation and characterization of transcripts induced by androgen withdrawal and apoptotic cell death in the rat ventral prostate.";
Mol. Endocrinol. 5:1381-1388(1991).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 219;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
 human and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
-!- FUNCTION: Component of tight junction (TJ) strands.
-!- SUBCELLULAR LOCATION: Integral membrane protein.
-!- ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Keen T.J., Inglehearn C.F.;
Submitted (SEP-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Missing (in isoform 2).
/FTId=VSP 001101.
62F67810D9B9BD37 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                          unction; Transmembrane; Alternative splicing
                                                                                                                               Note=No experimental confirmation available; -!- SIMILARITY: Belongs to the claudin family.
                                                                Event=Alternative splicing; Named isoforms=2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.0%; Score 9; DB 1;
100.0%; Pred. No. 0.15;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
Claudin-3 (Ventral prostate.1 protein) (RVP1)
                                                                                                     Name=2;
IsoId=09Z0G9-2; Sequence=VSP_001101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            219 AA
                                                                                         IsoId=Q9Z0G9-1; Sequence=Displayed;
                                                                                                                                                                                                                                                                                                                                                                                                                       POTENTIAL.
POTENTIAL.
POTENTIAL.
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                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23284 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 52
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               47 WEGLWMINCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   46 WEGLWMNCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=10116;
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116
160
72
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TRANSMEM
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Q63400;
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CLD3 RAT
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CLDH HUMAN
P56750;
30-MAY-2000
30-MAY-2000
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CLDH HUMAN
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ss Institute of Bioinformatics and the EMBL outstation informatics Institute. There are no restrictions on its fit institutions as long as its content is in no way statement is not removed. Usage by and for commercial is a license agreement (See http://www.isb-sib.ch/announce/tolicense@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Clostridium perfringens enterotoxin utilizes two structurally related membrane proteins as functional receptors in vivo."; J. Biol. Chem. 272:26652-26658(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
CLD3 HUMAN
STANDARD; PRT; 220 AA.

10 CLD3 HUMAN
STANDARD; PRT; 220 AA.

TO 15551;
DT 30-MAY-2000 (Rel. 39, Last amnotation update)
DT 30-MAY-2000 (Rel. 39, Last amnotation update)
DT 10-OCT-2003 (Rel. 42, Last amnotation update)
DE Claudin-3 (Clostridium perfringens enterotoxin receptor 2) (CPE-CD 2) (CPE-R 2) (Ventral prostate.1 protein homolog) (HRVP1).

S Homo sapiens (Human).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Homo.

OX NCBI TAXID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RP MEDLINE-98110580; Pubmed=9441748;
RA Pacock R.B., Keen T.J., Inglehearn C.F.;
RT "Analysis of a human gene homologous to rat ventral prostate.1
RT "Analysis of a human gene homologous to rat ventral prostate.1
RT REDINDE-97476771; Pubmed=9334247;
RX MEDLINE-97476771; Pubmed=9334247;
RA Sugimoto N.;
RA Katahira J., Sugiyama H., Inoue N., Horiguchi Y., Matsuda M.,
RA Sugimoto N.;
RA Sugimoto N.;
RA Katahira J., Sugiyama enterotoxin utilizes two structurally related
RT membrane proteins as functional receptors in vivo.";
RT membrane proteins as functional receptors in vivo.";
RN SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                  G -> S (IN REF. 1).
MISSING (IN REF. 1).
DYV -> TISERPGARTPHHHHYQPSMYPTRPACSLASETT
PPSRRLQTPRSLLARLEEDRQPGVPFSPVAT (IN REF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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O
                                                            This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EM the European Bioinformatics Institute. There are no restruse by non-profit institutions as long as its content modified and this statement is not removed. Usage by and entities requires a license agreement (See http://www.isb-sor send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 219;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
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                  LOCATION: Integral membrane protein. Belongs to the claudin family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.0%; Score 9; DB 1;
.00.0%; Pred. No. 0.15;
.ve 0; Mismatches
     (TJ)
       ponent of tight junction
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POTENTIAL.
POTENTIAL.
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                                                                                                                                                                                    EMBL; M74067; AAA41760.1; -.

EMBL; M74067; AAA41760.1; -.

InterPro; IPR006188; Claudin.

InterPro; IPR004031; PMP22 Claudin.

Pfam; PF00822; PMP22 Claudin.

PROSITE; PR01077; CLAUDIN.

PROSITE; PS01346; CLAUDIN.

TRANSMEM 81 101 POTENTIA.

TRANSMEM 116 136 POTENTIA.

TRANSMEM 162 182 POTENTIA.

TRANSMEM 162 182 POTENTIA.

CONFLICT 55 55 MISSING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MW
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       FUNCTION: Comp
SUBCELLULAR LO
SIMILARITY: Be
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9; Conse
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Best Local S
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MEDLINE=22388257; PubMed=12477932;

Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

Altschul S.F., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A platchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

A prapleton M.J., Osares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

A stapleton M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

A Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

A Robar S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

A Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

A Willalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

A Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

A Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

A Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

A Schnerch A., Schein J.E., Jones S., M., Marra M.A.,

B cheritield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

A Generation and initial analysis of more than 15,000 full-length

Thuman and mouse cDNA sequences.";

A proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).

--- FUNCTION: Component of tight junction (TU) strands.

--- FUNCTION: Component of tight junction (TU) strands.

--- FUNCTION: Component of tight junction (TU) strands.

--- DISEASE: Haploinsufficiency of CLDN3 may be the cause of certain

--- Cardiovascular and musculo-skeletal abnormalities observed in

--- Cardiovascular and musculo-skeletal abnormalities observed in

--- Cardiovascular and musculo-skeletal abnormalities.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Williams-Beuren syndrome (WBS), a rare developmental disorder. It is a contiguous gene deletion syndrome involving genes from chromosome band 7q11.23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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EMBL; AB000714; BAA22986.1; -.

EMBL; BC016056; AAH16056.1; -.

Genew; HGNC:2045; CLDN3.

MIM; 602910; -.

GO; GO:0005887; C:integral to plasma membrane; TAS.

GO; GO:0004888; F:transmembrane receptor activity; TAS.

InterPro; IPR006187; Claudin.

InterPro; IPR004031; PMP22 Claudin.

Pfam; PF00822; PMP22 Claudin.

PFAM; PF00822; PMP22 Claudin.

PRINTS; PR01077; CLAUDIN.

PROSITE; PS01346; CLAUDIN: 1.
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(Rel. 39, Last sequence update)
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.00.0%; Pred. No. 0.1
.ve. 0; Mismatches
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Best Local Similarity
Matches 9; Conserv
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Firmicutes; Bacillales; Bacillaceae; Bacillus.

FROM N.A

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Bacillus subtilis
                                                                                   NCBI_TaxID=1423;
                                                               Bacteria;
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                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.

WASEDLINE=20289799; PubMed=10830953;
WASEDLINE=20289799; PubMed=10.
WASEDLINE=2028979; WaseDLINE=202979; WaseDLINE=202979; WaseDLINE=202979; WaseDLINE=202979; WaseDLINE=202979; WaseDLINE=202979; WaseDLINE=2029799; WaseDLINE=202979; WaseDLINE=202979; WaseDLINE=202979; WaseDLINE=202979; WaseDLINE=202979; WaseDLINE=202979; WaseDLINE=2029799; WaseDLINE=202979; WaseDLINE=2029799; WaseDLINE=202979; WaseDLINE=2029799; WaseDLINE=2029799
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                                                                                   .; Chordata; Craniata; Vertebrata; Eutele; Primates; Catarrhini; Hominidae; Homo
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                                                                                                                                                                       SEQUENCE FROM N.A.
Keen T.J., Inglehearn C.F.;
Submitted (NOV-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
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      42, Last annotation update)
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InterPro; IPR006188; Claudin reg.
InterPro; IPR004031; PMP22 Claudin.
Pfam; PF00822; PMP22 Claudin; 1.
PRINTS; PR01077; CLAUDIN,
PROSITE; PS01346; CLAUDIN, 1.
Tight junction; Transmembrane.
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100.0%; Pre
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EMBL; AP001707; BAA95566.1; -.
Genew; HGNC:2038; CLDN17.
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                                                                  (Human)
                                                                                  Eukaryota, Metazoa;
Mammalia, Eutheria;
NCBI_TaxID=9606;
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224 AA;
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                                         CLDN17.
Homo sapiens
10-OCT-2003
Claudin-17.
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8, Last sequence update) 2, Last annotation update) ein 17M (GSP17M).

Created)

STANDARD;

RESULT 12 G17M\_BACSU ID G17M\_BACSU STANDA AC P80241; DT 01-FEB-1995 (Rel. 31, DT 15-JUL-1999 (Rel. 38, DT 10-OCT-2003 (Rel. 42, DE General stress protei

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A SULJANCE TRUNK N.A.

SURJANCE FROM N.A.

RA MINISTER, Oggaswara N., Moszer I., Albertini A.M., Alloni G.,

RA MINISTER, Oggaswara N., Moszer I., Albertini A.M., Borchert S.,

RA Azevedo V., Bertero M.G., Bessieres P., Bolotin A., Borchert S.,

RA Azevedo V., Bertero M.G., Bessieres P., Bolotin A., Borchert S.,

RA Borniss R., Boursier L., Brans A., Braun M., Brigmell S.C., Bron S.,

RA Broille S., Krodani J.J., Connerton I.F., Cummings N.J., Daniel R.A.,

RA Britan K.D., Errington J., Fabret C., Ferrari E., Foulger D.,

RA Ghim S.Y., Glaser P., Goffeau A., Golightly B.J., Grandi G.,

RA Ghim S.Y., Glaser P., Goffeau A., Golightly B.J., Grandi G.,

RA Hilbert H., Holsappel S., Hosono S., Hullo M.F., Itaya M., Jones L.,

RA Joris B., Karamata D., Kashhara Y., Klaerr Blanchard M., Klein C.,

RA Kurita K., Levine A., Liu H., Masuda S., Mauel C., Medique C.,

RA Kurita K., Levine A., Liu H., Masuda S., Manel C., Medique C.,

RA Mone D., O'Reilly M., Ogawa K., Ogiwara A., Oudega B., Park S.H.,

RA Parro V., Pohl T.M., Portetelle D., Porvollik S., Presecott A.M.,

RA Sato T., Scanlan E., Schleich S., Schroeter R., Scoffone F.,

RA Sato T., Scanlan E., Schleich S., Schroeter R., Scoffone F.,

RA Sato T., Scanlan E., Schleich S., Schroeter R., Scoffone F.,

RA Sato T., Scanlan E., Schleich S., Schroeter R., Scoffone F.,

RA Schiguchi J., Sekowska A., Tacconi B., Takagi T., Takahashi H., Takemaru K.,

RA Takeuchi M., Tamakoshi A., Tarakaha P., Tarenguru K.,

RA Takeuchi M., Tamakoshi A., Taramarot B., Schroeter R., Walters P., Walburt R., Wedler E., Wedler H., Welterenegger T.,

RA Viari A., Wambutt R., Wadler H., Welterenegger T.,

RA Viari A., Wambutter R., Wedler H., Welterenegger T.,

RA Vishida K., Yoshikawa H.F., Zumstein E., Yoshikawa H., Danchin A., Tarentu B.,

Rantinish P., Subhishawa H.F., Zumstein E., Sohkikawa H., Danchin A., Tarentu B., Shanchin B., Sh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                               MEDLINE=97417488; PubMed=9272861;
MEDLINE=97417488; PubMed=9272861;
Yamamoto H., Uchiyama S., Nugroho F.A., Sekiguchi J.;
Cloning and sequencing of a 35.7 kb in the 70 degree-73 degree region of the Bacillus subtilis genome reveal genes for a new two-component system, three spore germination proteins, an iron uptake system and a general stress response protein.";
Gene 194:191-199(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -!- INDUCTION: By heat shock, salt stress, oxidative stress, glucose limitation and oxygen limitation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE OF 1-21.
STRAIN=168 / IS58;
MEDLINE=94282319; PubMed=8012595;
Woelker U., Engelmann S., Maul B., Riethdorf S., Voelker A.,
Schmid R., Mach H., Hecker M.;
"Analysis of the induction of general stress proteins of Bacillus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             subtilis.";
Microbiology 140:741-752(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; D86417; BAA22314.1; -.
EMBL; Z99108; CAB12584.1; -.
PIR; G69811; G69811.
SubtiList; BG19020; yflT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nature 390:249-256(1997).
                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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101 GMKCTRC 107
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100
141
191 AA;
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         SEQUENCE FROM N.A
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SEQUENCE
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CLDN7.
Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBI_TaxID=10116;
                                                            Gaps
                                                                                                                                                                                                                                                                                                                                         Arnason U., Gullberg A., Janke A.;
Arnason U., Gullberg A., Janke A.;
"Phylogenetic analyses of mitochondrial DNA suggest a sister group relationship between Xenarthra (Edentata) and Ferungulates.";
Mol. Biol. Evol. 14:762-768(1997).
-!- CATALYTIC ACTIVITY: NADH + ubiquinone = NAD(+) + ubiquinol.
-!- SIMILARITY: Belongs to the complex I subunit 3 family.
                                                                                                                                                                                                                                                                     Chordata; Craniata; Vertebrata; Euteleostomi;
Edentata; Dasypodidae; Dasypus.
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                                     Length 115;
                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         InterPro; IPR000440; Oxidored_q4.

Pfam; PF00507; Oxidored_q4; 1.
Oxidoreductase; NAD; Ubiquinone; Mitochondrion.
SEQUENCE 115 AA; 13034 MW; 397E1705EB92E571 CRC64;
                                                                                                                                                                                      Jejur,

15-JUL-1998 (Rel. 36, Last sequence update)

15-JUL-1998 (Rel. 38, Last annotation update)

15-JUL-1999 (Rel. 38, Last annotation update)

15-JUL-1999 (Rel. 38, Last annotation update)

NADH-ubiquinone oxidoreductase chain 3 (EC 1.6.5.3).

MIND3 OR ND3 OR NADH3.

Dasypus novemcinctus (Nine-banded armadillo).

Mitochondrion.

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eut

Mammalia; Eutheria; Edentata; Dasypodidae; Dasypus.
               6D25F4637C55779A CRC64;
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30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
                                      DB 1;
                                    Score 7; DB 1;
; Pred. No. 10;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                 PubMed=9214749;
                                3.1%; Scu-
100.0%; Pr'
0;
       proteome.
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                                       Query Match
Best Local Similarity 100.
Matches 7; Conservative
                                                                                                                                                                     STANDARD;
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        Complete F
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30-MAY-2000 (Rel.
30-MAY-2000 (Rel.
                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. MEDLINE=97357423;
                                                                                                   DNEKVKA
                                                                                       DNEKVKA
      Heat shock;
SEQUENCE 1
                                                                                                                                                RESULT 13
NU3M DASNO
ID NU3M DASNO
AC O21332;
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CLD7_RAT
ID _CLD7_RAT
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Matches 7
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                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
30-MAY-2000 (Rel. 39, Last annotation update)
Claudin-like protein ZF-A9.
Brachydanio rerio (Zebrafish) (Danio rerio).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
NCBI_TaxID=7955;
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Keen T.J., Inglehearn C.F.;
Submitted (OCT-1998) to the EMBL/GenBank/DDBJ databases.

-!- FUNCTION: Component of tight junction (TJ) strands.

-!- SUBCELLULAR LOCATION: Integral membrane protein.

-!- SIMILARITY: Belongs to the claudin family.
Keen T.J., Inglehearn C.F.; Submitted (OCT-1998) to the EMBL/GenBank/DDBJ databases.
Submitted (OCT-1998) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: Component of tight junction (TJ) strands.
-!- SUBCELLULAR LOCATION: Integral membrane protein.
-!- SIMILARITY: Belongs to the claudin family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      83B445908DFFF41A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.1%; Score 7; DB 1;
100.0%; Pred. No. 16;
:ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       POTENTIAL. POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL, AJ011811; CAA09790.1; -.
InterPro; IPR006187; Claudin.
InterPro; IPR006188; Claudin.reg.
InterPro; IPR004031; PMP22 Claudin.
Pfam; PF00822; PMP22 Claudin; 1.
PRINTS; PR01077; CLAUDIN.
PROSITE; PS01346; CLAUDIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro; IPR006187; Claudin.
InterPro; IPR006188; Claudin reg.
InterPro; IPR004031; PMP22 Claudin.
Pfam; PF00822; PMP22 Claudin. 1.
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120 PC
161 PC
, 20366 MW;
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Best Local Similarity luv.
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PRINTS; PR01077; CLAUDIN.

PROSITE; PS01346; CLAUDIN; 1.

Tight junction; Transmembrane.

TRANSMEM 8 28 POTENTIAL.

TRANSMEM 81 101 POTENTIAL.

TRANSMEM 114 134 POTENTIAL.

TRANSMEM 159 179 POTENTIAL.

TRANSMEM 159 179 POTENTIAL.

SEQUENCE 209 AA; 22091 MW; C413143811853D58 CRC64;
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Length 209;	0; Indels			
Query Match 3.1%; Score 7; DB 1; Length 209; Best Local Similarity 100.0%; Pred. No. 17;	ಹ	Qy 144 IIRDFYN 150	Db 142 IIRDFYN 148	

Query Match

Search completed: September 1, 2004, 16:58:39 Job time: 14 secs

0;

Gaps

.; 0

 us-10-063-732-120.olig6.rag

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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OM protein - protein search, using sw model

1, 2004, 16:54:59 September Run on:

(without alignments)
1155.876 Million cell updates/sec

US-10-063-732-120 225 1 MATHALEIAGLFLGGVGMVG.....QKSYHTGKKSPSVYSRSQYV 225 Title: Perfect score: Sequence:

Scoring table:

segs, 282547505 residues OLIGO Gapop 60.0 , Gapext 60.0

1586107 Searched:

Total number of hits satisfying chosen parameters: 9 Word size

4883

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Listing first 45 summaries

Database :

A\_Geneseq\_29Jan04:\*
1: geneseqp1980s:\*
2: geneseqp1990s:\*
3: geneseqp2000s:\*
4: geneseqp2001s:\*
5: geneseqp2003as:\*
7: geneseqp2003as:\*
8: geneseqp2003bs:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

STIMMARTES

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SUMMARIES		AAY99433	AAB66182	AAM78572	AAU29202	AAB87585	AAG89285	ABG95910	ABU58578	ABU88126	ABU84441	ABR66315	ABR65705	ABU99645	ABU82884	ABU90005	ABR68254	ABU96307	ABU92738	ABO08815	ABO02867	ABR75021	ABR94783	ABU85756	ABU98916	31
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ABU91837	ABU89530	ABU86371	ABU67584	ABU80612	ABU90935	ABO33994	ABR99530	ABR98920	ABO16443	ABR92343	ABO18984	ABR78405	ABU72011	ABU85141	ABO00280	AB011612	ABO02257	ABU88831	ABU83526
9	9	9	9	9	9	9	9	9	9	9	Q	9	φ	9	9	9	ø	9	9
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225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225
		28				32		34	32	_	37		39		41	42	43	44	45

## ALIGNMENTS

diagnosis; screening.			
standard; protein; 225 AA.  00 (first entry)  1573 (UNQ779) amino acid sequence SEQ ID NO:328.  O polypeptide; membrane bound protein; receptor; rane; secretion; immunoadhesion; pharmaceutical;	A.2.	99WO-US020111.	98US-0098716P. 98US-0098749P. 98US-0098750P. 98US-0098803P. 98US-0098812P. 98US-0098813P. 98US-0099536P. 98US-0099596P. 98US-0099596P. 98US-0099764P. 98US-0099764P. 98US-0099764P. 98US-0099764P. 98US-009976P. 98US-0099815P. 98US-0099816P. 98US-0099816P. 98US-0099816P. 98US-0099816P. 98US-010038P. 98US-010038P. 98US-010038P.
AY99433 st AY99433; B-AUG-2000 uman PRO1E uman; PRO	Homo sapiens. WO200012708-A2	09-MAR-2000. 01-SEP-1999;	01-SEP-1998; 01-SEP-1998; 02-SEP-1998; 02-SEP-1998; 02-SEP-1998; 09-SEP-1998; 09-SEP-1998; 09-SEP-1998; 10-SEP-1998; 10-SEP-1998; 10-SEP-1998; 10-SEP-1998; 10-SEP-1998; 10-SEP-1998; 10-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998; 11-SEP-1998;
AAXY9944 IDAXY9944 XXX AC AX AXXXXXXXXXXXXXXXXXXXXXXXXXXXX	S X M X	S X F X	######################################

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98US-0100684P.
98US-0100711P.
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98US-0101044P.
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98US-0106033P.
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17-SEP-1998;
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28-OCT-1998;
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TAGIIFIITGMVVLIPVSWVANAIIRDFYNSIVNVAQKRELGEALYLGWTTALVLIVGGA 180
                                                                                                                                                                                                                                                                                                                                                                                New mammalian DNA sequences encoding transmembrane, receptor or secreted PRO polypeptides, useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interactions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA37022 to AAA37144 encode the new isolated human transmembrane, receptor or secreted PRO polypeptides given in AAY99340 to AAY99462. The transmembrane and receptor PRO proteins can be used for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interactions. The polypeptides and nucleotide sequences encoding then have various industrial applications, including uses as pharmaceutical and diagnostic agents. AAA37145 to AAA37330 represent PCR primers and hybridisation probes used in the isolation of the PRO polypeptides from the present invention
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                                                                                                                                                                                                                                                                                                                     Smith V,
                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 12; Fig 188; 773pp; English
                                                                                                                                                                                                                                                                                                                      Gurney AL,
98US-0106905P.
98US-0106932P.
98US-0106932P.
98US-0108783P.
98US-01087787P.
98US-0108779P.
98US-010878P.
98US-0108802P.
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98US-0108867P.
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N-PSDB; AAA37115.
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Matches 225; Conser
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LFCCVFCCNEKSSSYRYSIPSHRTTQKSYHTGKKSPSVYSRSQYV

181 181

standard; protein; 225 AA

RESULT 2 AAB66182 ID AAB66182 s

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RESULT 3

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Hillan KJ;
Watanabe CK;
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                                                                                                                                                                                                                                                                                                                                                                                           gene
                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to secreted and transmembrane proteins. These proteins and the DNA encoding them may be used as hybridization probes, in chromosome and gene mapping and in the generation of antisense RNA and DNA. They may also be used used to generate either transgenic animals or knockout animals which are in turn useful for development and screening of therapeutically useful reagents. The nuclacids may also be used in gene therapy
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Gurney AL, |
A, Tumas D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 225;
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weski PJ, Grimaldi CJ, Gur
'A, Smith V, Stewart TA,
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Pred. No. 3.2e-212
Mismatches 0;
                                                            Secreted; transmembrane; gene therapy
                                                                                                                                                                                                                                                                                                                                                                              proteins
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                                                                                                                                                                                                                                                                                                                                                                                    useful as hybridization probes, therapy.
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Best Local Similarity 100.0%; P
Matches 225; Conservative 0;
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99US-0144758P.
99US-0145698P.
99WO-US020111.
99WO-US028313.
99WO-US028551.
99WO-US030095.
2000WO-US000219.
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Godowski
                                                                                                                                              2000WO-US004342
                                       Protein of the invention #94
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WI;
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                        entry)
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Gao W, Goddard A, G
Pan J, Paoni NF, Ro
Williams PM, Wood WI
                     (first
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                                                                                                     WO200078961-A1
                                                                                Unidentified
                                                                                                                                             18-FEB-2000;
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29-OCT-1999;
30-NOV-1999;
02-DEC-1999;
16-DEC-1999;
                     02-APR-2001
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The invention relates to polynucleotides (AAKS1456-AAKS3435) and the encoded polypeptides (AAM78323-AAM80302) that exhibit activity elating to cytokine, cell proliferation or cell differentiation or which may induce production of other cytokines in other cell populations. The polypeptides are useful in gene therapy, vaccines or peptide therapy. The polypeptides have various cytokine-like activities, e.g. stem cell growth factor activity, haematopoiesis regulating activity, tissue growth factor activity, immunomodulatory activity and activity, inhibin activity and may be useful in the diagnosis and/or treatment of cancer, leukaemia, nervous system disorders, arthritis and inflammation. Note: Records for SEQ ID NO 2110 (AAK52581), 2111 (AAK52582) and 3666 (AAM80020) are omitted as the relevant pages from the sequence listing were missing at the time of publication
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0
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                                                                                                                                  Human, cytokine, cell proliferation, cell differentiation, gene therapy, vaccine, peptide therapy, stem cell growth factor, haematopoiesis, tissue growth factor, immunomodulatory, cancer, leukaemia, nervous system disorder, arthritis, inflammation.
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J, Ren F,
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100.0%; Pred. No. 3.2e-212;
:ive 0; Mismatches 0;
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Goodrich R;
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           AAM78572 standard; protein; 225 AA
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                                                                                                                                                                                                                                                                                                                             03-FEB-2000; 2000US-00496914.
27-APR-2000; 2000US-00560875.
20-JUN-2000; 2000US-00598075.
19-JUL-2000; 2000US-00620325.
01-SEP-2000; 2000US-00654936.
15-SEP-2000; 2000US-00663561.
20-OCT-2000; 2000US-00693325.
30-NOV-2000; 2000US-00693325.
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Wejhrman T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Drmanac RT,
                                                                                                      Human protein SEQ ID NO 1234
                                                                                                                                                                                                                                                                                                  05-FEB-2001; 2001WO-US004098
                                                                        (first entry)
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Best Local Similarity 100.
Matches 225; Conservative
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N-PSDB; AAK51705.
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Ma Y, Zhao QA,
Xue AJ, Yang Y,
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                                                                                                                                                                                                           Homo sapiens.
                                                                       06-NOV-2001
                                                                                                                                                                                                                                                                    09-AUG-2001
                                           AAM78572;
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(GETH ) GENENTECH INC.
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                                                                                                                                                                       PRO polypeptide; mammal; tumour; cancer; human; cattle; horse; sheep; dog; cat; pig; goat; rabbit; tumour necrosis factor alpha; INF-alpha; blood; chondrocyte cell; cell proliferation; cell differentiation; colon; adrenal; lung; breast; prostate; rectum; cervix; liver; genetic disorder.
             LFCCVFCCNEKSSSYRYSIPSHRTTQKSYHTGKKSPSVYSRSQYV 225
                                                                                                                                                         Human PRO polypeptide sequence #179
                                                                                                         protein; 225 AA
                                                                                                                                                                                                                                                                                                                                                                                  2000US-0192655P.
2000US-0193053P.
2000US-0193053P.
2000US-0194449P.
2000US-0194449P.
2000US-0194449P.
2000US-0195975P.
2000US-019600P.
2000US-019600P.
2000US-01960P.
2000US-0209832P.
2000WO-US01326P.
2000WO-US03328.
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00018-0187202P.

00018-0189320P.

00018-0189328P.

00018-0190828P.

00018-0190828P.

00018-0191048P.

00018-0191314P.
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                                                                                                                                           (first entry)
                                                                                                           standard;
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02-WAR-2000;
03-WAR-2000;
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14-WAR-2000;
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11-APR-2000;
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11-APR-2000;
11-APR-2000;
25-APR-2000;
27-MAY-2000;
28-MAY-2000;
28-MAY-2000;
28-MAY-2000;
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               121
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Sequences AAU29024-AAU29328 represent PRO polypeptides of the invention.

The PRO polypeptides and their associated nucleic acids can be used to detect the presence of a tumour in a mammal by comparing the level of expression of a PRO polypeptide in a test sample of cells from the animal cand a control sample of normal cells, whereby a higher level of expression in the test sample indicates the presence of a tumour in the test sample indicates the presence of a tumour in the ammals include dogs, cats, cattle, horses, sheep, pigs, goats and rabbits but are preferably human. The polypeptides can be used to stimulate tumour necrosis factor (TNF) alpha release from human blood, when contacted with it. A specific polypeptide can be used to stimulate to the proliferation or differentiation of chondrocyte cells. The PRO proteins can be used to determine the presence of tumours and also susceptibility to tumour development, particularly adrenal, lung, colon, breast, prostate, rectal, cervical, or liver tumours, in mammalian breast, prostate, rectal, cervical, or liver tumours, in mammalian subjects. The oligonucleotide probes specific for the PRO nucleic acids can be used for genetic analysis of individuals with genetic disorders
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                                                                                                                                                          Novel nucleic acids encoding PRO polypeptides, used to diagnose the presence of tumors, such as prostate and breast tumors, in mammals and screen for modulators of the compounds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RMOCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MATHALEIAGLFLGGVGMVGTVAVTVMPQWRVSAFIENNIVVFENFWEGLWMNCVRQANI
  Gurney AL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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%, Chen J, Desnoyers L, Goddard A, Godowski PJ, Smith V, Watanabe CK, Wood WI, Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 225; DB 4; L
100.0%; Pred. No. 3.2e-212;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                            Claim 11; Fig 358; 774pp; English
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Best Local Similarity 100.
Matches 225; Conservative
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                                                                                    WPI; 2001-602746/68.
N-PSDB; AAS46103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 225 AA;
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            8
          Baker F
Pan J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 5
AAB87585
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The present sequence is a human PRO polypeptide (secreted and transmembrane). The PRO protein, and PRO agonists, PRO antagonists or anti-PRO antibodies are useful for preparation of a medicament useful in the treatment of a condition which is responsive to the PRO protein, agonists, antagonists or anti-PRO antibodies. The PRO protein may also be employed as molecular weight markers for protein electrophoresis. The PRO coding sequence has applications in molecular biology, including use as hybridisation probes, and in chromosome and gene mapping
                                                                                                                                                                                                                                                                                                         acids encoding PRO polypeptides, useful in molecular
use as hybridization probes, and in chromosome and
                                                                                                                                                                                                                                     Godowski
                                                                                                                                                                                                                                   Goddard A,
Wood WI;
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                                                                                                                                                                                                                                  Gerritsen Matanabe
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100.0%; Pr
           99WO-USO20111.

99WO-USO21090.

99US-0169495P.

99US-0170262P.

2000WO-USO04341.

2000WO-USO04342.

2000WO-USO04414.

2000WO-USO04414.

2000WO-USO0601.

2000WO-USO08439.

2000WS-0191007P.

2000WS-0191007P.

2000WS-019397P.

2000WO-USO08439.

2000WO-USO08439.

2000WO-USO08439.
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ey AL,
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                                                                                                                                                                                                                                 Filvaro
                                                                                                                                                                                                                                                                                                                                                     Claim 12; Fig 120;
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Best Local Similarity
Matches 225; Conser
                                                                                                                                                                                                          (GETH ) GENENTECH
                                                                                                                                                                                                                                                                               N-PSDB; AAF92117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 225 AA;
            01-SEP-1999;
15-SEP-1999;
07-DEC-1999;
09-DEC-1999;
11-JAN-2000;
18-FEB-2000;
22-FEB-2000;
01-MAR-2000;
01-MAR-2000;
21-MAR-2000;
25-APR-2000;
25-APR-2000;
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Grimaldi CJ,
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                                                                                          LALSPDIQAARGIMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL 120
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                                                                                                                                   TAGIIFIITGMVVLIPVSWVANALIRDFYNSIVNVAQKRELGEALYLGWTTALVLIVGGA
                                                                                                                                                 LFLGGVGMVGTVAVTVMPQWRVSAFIENNIVVFENFWEGLWMNCVRQANI
                                                          RMOCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL
                          0;
Score 225; DB 4; Length 225; Pred. No. 3.2e-212; Mismatches 0; Indels
                                                                                                                                                                                               LFCCVFCCNEKSSSYRYSIPSHRITQKSYHIGKKSPSVYSRSQYV
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RESULT 6
AAG89285
ID AAG89285 standard; protein; 225 AA.
XX
AC AAG89285;
XX
DT 11-SEP-2001 (first entry)
XX
DE Human secreted protein, SEQ ID NO: 405.
XX
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ABG95910 standard; protein; 225 AA

ABG95910 ID ABG9 XX

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potentially secreted proteins. The nucleic acids and the polypeptides they encode may be used in the prevention, treatment and diagnosis of diseases associated with inappropriate GENSET gene expression. For example, they be used to treat disorders associated with decreased GENSET gene expression by rectifying mutations or deletions in a patient's genome that affect the activity of GENSET or by supplementing the patients own production of GENSET polypeptides. Conversely, antisense nucleic acid molecules may be administered to down regulate GENSET expression. The sense and antisense nucleic acids may also be used as DNA probes in diagnostic assays to detect and quantitate the presence of similar nucleic acid sequences in samples, and hence to determine which patients may be in need of restorative therapy. The GENSET polypeptides may be used as antigens in the production of antibodies and in assays to identify modulators (agonists and antagonists) of GENSET polypeptide of the present is a GENSET polypeptide of the present in the present is a GENSET polypeptide of the present sequence is a GENSET polypeptide of the present and the prese
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Full length GENSET human nucleic acids encoding potentially secreted proteins, useful in gene therapy and vaccination against a variety of diseases, and for diagnosis of those diseases.
     therapy; vaccine; treatment; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RMQCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MATHALEIAGLFLGGVGMVGTVAVTVMPQWRVSAFIENNIVVFENFWEGLWMNCVRQANI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to full length GENSET human nucleic acids
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100.0%; Score 225; DB 4; L
Best Local Similarity 100.0%; Pred. No. 3.2e-212;
Matches 225; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 21; Page 885-886; 921pp; English.
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 secreted protein; gene
                                                                                                                                                                                                                      07-DEC-2000; 2000WO-IB001938.
                                                                                                                                                                                                                                                                    08-DEC-1999; 99US-0169629P.
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                                                                                                                       WO200142451-A2
                                                                                                                                                                                                                                                                                                                                            (GEST ) GENSET
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   Human;
GENSET.
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The invention relates to an isolated secreted and transmembrane PRO polypebtide having 80 % sequence identity to a sequence appearing as polypebtide having 80 % sequence identity to a sequence appearing as polypebtide having 80 % sequence defining by the containing and the proteins with their associated signal peptide. Also included are the nucleic acids encoding the proteins, vector; host cells, fusion proteins and antibodies which specifically bind to the proteins. The proteins are useful for detecting a polypeptide designated as A, B, Cor D in a sample suspected of containing an A, B, C or D polypeptide, by contacting the sample with a polypeptide designated as B, F, G, Hor I (or vice versa) and the teaming the formation of A,E, B/F, B/G, C/H or D/I polypeptide conjugate in the sample, where the formation of the conjugate is an exposite to the presence of an A, B, C or D polypeptide, C is a conjugate in the sample, where A is a PRO1027 polypeptide, B is a PRO2010 polypeptide, H is a PRO1096 polypeptide, F is a PRO1 polypeptide, B is a PRO2010 polypeptide, H is a PRO1096 polypeptide, The B, B, C or D polypeptide, The B, F, G, C or D polypeptide is a testing a processing the A, B, C or D polypeptide is a coll support. The proceins are useful for linking a biological or an artibodies against them are useful for modulating a biological or I. The bioactive molecule is a toxin, a radiolabel or an artibody. The processing the pro
                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated secreted and transmembrane PRO polypeptide useful for modulating biological activity of a cell, or for treating sports-related joint problems, osteoarthritis or rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                              Gerritsen ME,
Watanabe CK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 20; Fig 120; 399pp; English
15-SEP-1999; 99WO-US021090.
15-SEP-1999; 99WO-US021194.
22-DEC-1999; 99WO-US030720.
18-FEB-2000; 2000WO-US004341.
18-FEB-2000; 2000WO-US004342.
22-FEB-2000; 2000WO-US004342.
30-MAR-2000; 2000WO-US004414.
30-MAR-2000; 2000WO-US008439.
22-MAY-2000; 2000WO-US014042.
23-AUG-2000; 2000WO-US015264.
23-AUG-2000; 2000WO-US015264.
24-AUG-2000; 2000WO-US023528.
10-NOV-2000; 2000WO-US03378.
20-DEC-2000; 2000WO-US034956.
28-FEB-2001; 2001WO-US034956.
30-MAX-2001; 2001WO-US01443.
                                                                                                                                                                                                                                                                             2001WO-US021066
2001WO-US021735
                                                                                                                                                                                                                                                                                                                     (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                               Filvaroff C. Gurney
                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-731348/79.
N-PSDB; ABS74437.
                                                                                                                                                                                                                                                                                                                                                 Eaton DL, Fi
Grimaldi JC,
                                                                                                                                                                                                                                                                             29-JUN-2001;
        Human, secreted protein, transmembrane protein, antirheumatic, antiarthritic, osteopathic, sports-related joint problem; articular cartilage defect, osteoarthritis, rheumatoid arthritis.
                                                               secreted/transmembrane protein PRO1573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98WS-015019330.
98WS-0100683P.
98WS-0100684P.
98WS-0100930P.
                                                                                                                                                                                                                                                      97US-0064315P.
98US-0064215P.
98US-0082797P.
98US-008579P.
98US-008573P.
98US-0088021P.
98US-0088030P.
98US-0088034P.
98US-0088814P.
98US-0088814P.
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98US-0088814P.
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98US-0088814P.
98US-0088814P.
98US-0089653P.
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98US-0090644P.
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98US-0090648P.
98US-009069P.
98US-0096915P.
98US-009691P.
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98US-009691P.
98US-0099791P.
98US-0099791P.
98US-0099791P.
98US-0099791P.
98US-0099791P.
                                                                                                                                                                                                                                  2001US-00006867
                                         entry)
                                         (first
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22-APR-1998;
29-APR-1998;
04-JUN-1998;
04-JUN-1998;
04-JUN-1998;
10-JUN-1998;
10-JUN-1998;
11-JUN-1998;
11-JUN-1998;
12-JUN-1998;
12-JUN-1998;
12-JUN-1998;
13-JUN-1998;
14-JUN-1998;
15-JUN-1998;
16-JUN-1998;
17-JUN-1998;
18-AUG-1998;
17-JUN-1998;
18-AUG-1998;
18-AUG-1998;
10-SEP-1998;
10-SEP-1998;
10-SEP-1998;
11-SEP-1998;
11-SEP-1999;
11-SEP-1999;
11-MAY-1999;
11-MAY-1999;
                                                                                                                                                                                                                                  06-DEC-2001;
                                                                                                                                                   sapiens
                                         10-DEC-2002
              ABG95910;
                                                                     Human
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Godowski PJ;

Goddard A, Wood WI;

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98US-0077632P

98US-0077649P

98US-0077649P

98US-0077649P

98US-007764P

98US-0079664P

98US-0079664P

98US-0080194P

98US-0080194P

98US-0080194P

98US-0080194P

98US-0080194P

98US-0080194P

98US-0080194P

98US-0081195P

98US-0081648P

98US-008164P

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98US-008167P

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98US-008164P

98US-008811P

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             11-MAR-1998;
20-MAR-1998;
20-MAR-1998;
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20-MAR-1998;
27-MAR-1998;
27-MAR-1998;
31-MAR-1998;
31-MAR-1998;
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31-MAR-1998;
32-MAR-1998;
32-MAR-1998;
33-MAR-1998;
34-MAR-1998;
35-MAR-1998;
36-MAY-1998;
37-MAY-1998;
38-MAY-1998;
38-MAY-1998;
38-MAY-1998;
39-MAR-1998;
39-MAR-1998;
30-MAY-1998;
31-MAY-1998;
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identification, and in gene therapy. The antibody is useful as a therapeutic agent, in a diagnostic assay and for affinity purification the protein from recombinant cell culture natural sources. The present sequence represents a novel secreted or transmembrane protein of the
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Pred. No. 3.2e-212;
Mismatches 0;
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Best Local Similarity 100.0%; Pred. No. 3.2e-212;
Matches 225; Conservative 0; Mismatches 0;
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PR 22-UUN-1999; 98US-0090252P.

PR 24-UUN-1999; 98US-0090435P.

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PR 25-UUN-1999; 98US-0090644P.

PR 25-UUN-1999; 98US-0090644P.

PR 25-UUN-1999; 98US-0090644P.

PR 25-UUN-1999; 98US-0090634P.

PR 25-UUN-1999; 98US-0090632P.

PR 25-UUN-1999; 98US-0090632P.

PR 26-UUL-1999; 98US-0090632P.

PR 26-UUL-1999; 98US-0090632P.

PR 17-AUG-1999; 98US-0090632P.

PR 10-SEP-1999; 98US-0090632P.

PR 11-SEP-1999; 98US-0090632P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; PRO; secreted protein; transmembrane protein; extracellular domain; tumour necrosis factor-alpha; TNF-alpha; chondrocyte; proliferation; differentiation; cartilage disorder; bone disorder; arthritis; sports injury; cancer; tumour; diagnosis; adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix; liver; drug screening; transgenic animal; genetic analysis; antiarthritic; vulnerary; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                     MATHALEIAGLFLGGVGMVGTVAVTVMPQMRVSAFIENNIVVFENFWEGLWMNCVRQANI
                                                                                                                                                                                                                                                                                                                         61 RMOCKIYDSLLALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL
                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                   Length 225;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    225
                                                                                                                                                                                                                                                                                                                                                                                                                                                              LFCCVFCCNEKSSSYRYSIPSHRTTQKSYHTGKKSPSVYSRSQYV
                                                                                                                                                                                                                                                                  ; Score 225; DB 6; I; Pred. No. 3.2e-212; 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human secreted polypeptide PRO1573, SEQ ID NO:358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABR66315 standard; protein; 225
         98US-0101472P.

98US-0101477P.

98US-0101477P.

98US-0101738P.

98US-0101743P.

98US-0101743P.

98US-0101220P.

98US-010220P.

98US-0102240P.

98US-0102240P.

98US-0102240P.

98US-0102240P.

98US-0102571P.

98US-0102571P.

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98US-0102571P.

98US-0102571P.

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97US-0059266P.
97US-0062250P.
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                                                                                                                                                                                                                                                                                       Conservative
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23-SEP-1998;
23-SEP-1998;
23-SEP-1998;
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24-SEP-1998;
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24-SEP-1998;
25-SEP-1998;
29-SEP-1998;
29-SEP-1998;
30-SEP-1998;
30-SEP-1998;
30-SEP-1998;
01-OCT-1998;
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18-SEP-1997;
17-OCT-1997;
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                                                                                                                                                                                                                                                               Query Match
Best Local Simi
Matches 225;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-AUG-2003
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ABR66315
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PR 21-OCT-1997; 970S-0063466P.
PR 24-OCT-1997; 970S-0063120P.
PR 26-OCT-1997; 970S-0063120P.
PR 28-OCT-1997; 970S-006334P.
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PR 13-NOV-1997; 970S-006331P.
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PR 11-PRR1998; 970S-007763P.
PR 11-PRR1998; 970S-0077763P.
PR 11-PRR1998; 970S-0077778P.
PR 11-PRR1998; 970S-0077778P.
PR 11-PRR1998; 970S-0077778P.
PR 11-PRR1998; 970S-0077778P.
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PR 11-PRR1998; 970S-007778P.
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PR 11-PRR1998; 970S-00777
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98US-0099764P.

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extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
chondrocyte; proliferation; differentiation; cartilage disorder;
bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
liver; drug screening; transgenic animal; genetic analysis;
antiarthritic; vulnerary; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LALSPDLQAARGLMCAASVMSFLAFMMAILGMKCTRCTGDNEKVKAHILL
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                                                                                                                                                                                                                                                                                                                                                                                                                     JGGVGMVGTVAVTVMPQWRVSAFIENNIVVFENFWEGLWMNCVRQANI
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                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.0%; Pred. No. 3.2e-212;
Matches 225; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           secreted polypeptide PRO1573, SEQ ID NO:358
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98WS-0101751P.
98WS-0100683P.
98US-0100684P.
98US-0100930P.
98US-0100930P.
98US-0100849P.
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98US-0101472P.
98US-0101472P.
98US-0101473P.
98US-0101738P.
98US-0101738P.
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 16-SEP-1998;
17-SEP-1998;
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ABR65705
XX
AC ABR65
XX
AC ABR65
XX
DT 05-AU
XX
KW Human
XX
KW EXTRA
KW ChOnd
KW ACTRA
KW ADDE
KW ADDE
KW ADDE
KW ADDE
KW ADDE
KW ADT
XX
COON
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98US-008855P.
98US-008872P.
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26-JUN-1998;
27-JUN-1998;
27-JU
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TAGIIFIITGMVVLIPVSWVANAIIRDFYNSIVNVAQKRELGEALYLGWTTALVLIVGGA
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or alpha; chondrocyte cell; tumour; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MATHALEIAGLFLGGVGMVGTVAVTVMPQWRVSAFIENNIVVFENFWEGLWMNCVRQANI
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 225; DB 6; L
Pred. No. 3.2e-212;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human secreted/transmembrane protein (PRO) #179.
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0
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98US-0099763P.
98US-0100388P.
98US-0100664P.
98US-0101751P.
98US-0101751P.
98US-0101751P.
98US-0101751P.
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98US-0100683P.
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98US-01014P.
98US-010147P.
98US-0101472P.
98US-0101473P.
98US-0101473P.
98US-0101473P.
98US-010143P.
98US-0101733P.
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factor
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  10-SEP-1998;
16-SEP-1998;
16-SEP-1998;
16-SEP-1998;
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26-SEP-1998;
26-SEP-1998;
27-SEP-1998;
27-SE
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Best Local Simil
Matches 225; (
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ABU99645
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RX 14-280-1997; 9712-0052639.

PR 18-289-1997; 9712-00525639.

PR 21-007-1997; 9712-00512564.

PR 24-007-1997; 9712-0051254.

PR 24-007-1997; 9712-0051212.

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PR 28-007-1997; 9712-005124.

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PR 28-007-1997; 9712-005127.

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PR 28-NNR.1998; 9913-006912.

PR 28-NNR.1998; 9913-00912.

PR 28-NNR.1998; 9
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.ng; gene mapping; cytostatic.
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Pred. No. 3.2e-212;
Mismatches 0;
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Best Local Similarity 100.0%; P
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Novel human secreted and transmembrane protein PRO1573

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Qγ	QQ	QY	Db	δλ	QQ

<sup>121</sup> 61 61

181

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Gaps

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<sup>2004, 16:58:20</sup> 1, September Search completed: Sobot time: 56 secs

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